STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER RESOURCES

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C. H. PURCELL, Director of Public Works
EDWARD HYATT, State Engineer

Bulletin No. 54-A

EVAPORATION FROM WATER SURFACES IN CALIFORNIA

BASIC DATA

MCMXXI

1948

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INTRODUCTION

This is the second of two volumes which together comprise a report on evaporation from water surfaces in California. The first volume, published in 1947 as Bulletin No. 54, is essentially a summary of the basic records here presented as Bulletin No. 54-A.

The entire compilation was a cooperative undertaking supported by the California State Division of Water Resources and the Division of Irrigation and Water Conservation, U. S. Soil Conservation Service. Arthur A. Young, Irrigation Engineer in the latter organization, was the author of both volumes. Descriptions of different types of evaporation pans, the methods used in technical studies of evaporation, the coefficients applicable in converting evaporation from pans to that from large water surfaces, and other pertinent information, are set out in Bulletin No. 54.

The first table in Bulletin No. 54-A is numbered 18. Tables 1 to 17 are in Bulletin No. 54. The list of ''literature cited'' appearing in Bulletin 54 is repeated at the end of Bulletin 54-A. Citations are indicated in the tables by identifying numerals inclosed in parentheses.

TABLE 18

EVAPORATION AT ACTON (NEAR), LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ------------------- At Mellen's Ranch, Southwest of Palmdale, in Escondido Canyon, North Branch, Lat. 34° 40′ N., Long. 118° 16′ W.
  Elevation ------------------- 3,075 feet.
Evaporation pan:
  Type ------------------- Ground pan.
  Description ------------------- Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data------------- Los Angeles County Flood Control District.
Publication reference ---------- Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------- None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932---	2.64	1.94	5.88	6.92	7.80	10.18	13.38	13.98	10.94	7.89	6.49	3.13	91.17
1933---	3.04	4.42	6.26	6.86	7.10	10.19	12.78	12.29	10.08	8.10	7.46	3.95	92.53
1934---	4.62	3.54	7.18	9.00	10.90	9.23	13.80	13.43	10.35	7.71	4.56	3.92	98.24
1935---	2.94	3.99	4.01	5.38	8.02	11.80	13.00	11.67	10.24	7.80	5.54	4.64	89.03
1936---	4.75	2.21	6.00	6.53	10.12	11.34	13.04	13.22	10.82	6.96	6.74	3.51	95.24
1937---	1.80	2.66	4.35	6.36	7.62	9.94	13.26	13.54	10.58	7.92	4.62	4.30	86.95
1938---	4.36	2.35	3.24	5.62	7.32	9.26	11.86	11.62	9.51	6.96	7.12	3.91	83.13
1939---	3.02	3.32	3.96	6.24	8.02	10.77	12.50	[1]13.09	7.59	7.08	4.62	4.22	84.43
1940---	2.38	2.62	4.52	5.82	9.20	11.15	13.94	13.25	8.82	6.64	5.28	3.56	87.18
1941---	2.30	2.10	3.57	4.22	8.32	9.60	12.22	10.32	9.04	5.77	4.80	2.51	74.77
1942---	3.33	3.24	5.29	4.40	7.84	10.12	13.40	11.72	9.20	6.78	4.63	3.74	83.69
1943---	3.46	3.54	3.16	4.94	8.58	9.16	10.51	10.88	9.33	6.42	5.14	2.84	77.96
1944---	2.92	2.13	4.98	6.05	7.72	7.91	11.64	11.10	8.73	6.77	3.34	3.86	77.15
1945---	3.27	2.70	2.92	5.81	8.30	8.63	12.68	11.90	9.02	5.94	4.56	3.13	78.86
Mean--	3.20	2.91	4.66	6.01	8.35	9.95	12.72	12.29	9.59	7.05	5.35	3.66	85.74

[1] Partly estimated.

TABLE 19

EVAPORATION NEAR ALISAL NURSERY OF THE EMERGENCY RUBBER PROJECT, MONTEREY COUNTY, CALIFORNIA

Station:
  Location ------------------- Three and one-half miles southeast of Alisal Nursery, Lat. 36° 40′ N., Long. 121° 36′ W.
  Elevation ------------------- About 100 feet.
Evaporation pan:
  Type ------------------- U. S. Weather Bureau pan.
  Description ------------------- Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data------------- Emergency Rubber Project, Forest Service, U.S.D.A.
Publication reference ---------- None.
Meteorologic data ------------- Temperature, wind.

Month	Evaporation in inches			Mean temperature in °F			Total wind in miles		
	1944	1945	Mean	1944	1945	Mean	1944	1945	Annual
Jan.---------------	---------	2.45	2.45	---------	51	51	---------	2,203	2,203
Feb.---------------	---------	2.70	2.70	---------	51	51	---------	2,048	2,048
March---------------	---------	3.60	3.60	---------	50	50	---------	2,578	2,578
April---------------	---------	6.53	6.53	---------	55	55	---------	2,763	2,763
May---------------	---------	6.94	6.94	---------	58	58	---------	2,751	2,751
June---------------	---------	8.57	8.57	---------	62	62	---------	3,090	3,090
July---------------	7.59	---------	7.59	63	---------	63	---------	---------	---------
Aug.---------------	7.12	---------	7.12	63	---------	63	3,028	---------	3,028
Sept.---------------	6.47	---------	6.47	64	---------	64	2,675	---------	2,675
Oct.---------------	5.33	5.28	5.30	65	63	64	2,376	2,438	2,407
Nov.---------------	2.27	2.72	2.50	57	56	56	2,198	1,572	1,885
Dec.---------------	3.34	---------	3.34	54	---------	54	2,466	---------	2,466
Mean---------------	---------	---------	---------	---------	---------	---------	---------	---------	---------

TABLE 20

EVAPORATION AT ALVARADO (NEAR), ALAMEDA COUNTY, CALIFORNIA

Station:
  Location ------------------Three miles south of Alvarado at plant of Leslie-California Salt Company on San Francisco Bay. Lat. 37° 33′ N., Long. 122° 02′ W.[1]
  Elevation ------------------3 feet.
Evaporation pan:
  Type ----------------------U. S. Weather Bureau pan.
  Description ----------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data-------------U. S. Weather Bureau.
Publication reference ----------U. S. Weather Bureau Climatological Data (41).
Meteorologic data -------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1924---	-------	-------	-------	-------	-------	-------	-------	6.64	6.03	3.86	2.96	2.24	-------
1925---	2.11	2.25	4.20	4.91	6.09	8.22	8.45	7.23	6.06	4.18	2.31	1.84	57.85
1926---	-------	-------	4.85	4.98	7.26	7.30	7.85	6.64	5.96	3.48	2.74	2.19	-------
1927---	1.00	2.89	3.51	5.16	7.01	6.92	7.60	6.41	5.43	3.71	1.85	1.30	52.79
1928---	1.31	2.47	3.22	5.13	6.08	7.62	6.91	5.80	4.80	3.61	1.83	0.98	47.76
1929---	1.10	2.64	3.98	4.88	6.74	7.13	8.08	6.90	4.84	4.01	2.17	1.28	53.75
1930---	1.46	2.27	4.18	5.63	6.61	7.60	7.75	6.84	5.19	3.49	2.12	1.21	54.35
1931---	1.41	2.06	3.94	5.41	7.21	7.76	8.28	6.60	5.41	3.60	2.10	1.06	54.84
1932---	1.66	2.16	3.79	5.28	6.23	7.43	7.62	7.09	5.15	3.77	2.22	1.25	53.65
1933---	1.49	2.20	3.77	5.26	6.44	7.09	7.37	6.55	5.34	3.29	2.04	1.45	52.29
1934---	1.08	1.91	3.22	5.54	6.98	7.32	7.99	6.94	5.26	3.66	1.96	1.40	53.26
1935---	1.23	1.83	3.48	4.40	6.99	7.88	7.97	6.73	4.66	3.82	1.81	1.02	51.82
1936---	1.30	1.74	3.83	5.06	7.52	6.89	7.76	6.79	5.30	3.52	1.60	1.46	52.77
1937---	1.24	1.99	3.09	4.75	6.93	7.21	7.74	6.89	5.50	3.35	2.22	1.48	52.39
1938---	1.50	2.12	4.12	4.43	6.34	7.08	7.13	7.70	5.04	3.41	2.24	1.03	52.14
1939---	1.48	2.87	3.14	5.15	6.86	7.69	7.77	6.87	5.75	3.93	1.81	1.26	54.58
1940---	1.52	2.10	3.46	5.04	6.65	7.42	7.93	6.89	5.19	3.61	1.76	2.06	53.63
1941--	1.62	1.95	4.37	4.40	6.78	7.23	7.70	6.74	5.77	3.71	1.36	1.15	52.78
Mean--	1.41	2.22	3.77	5.02	6.75	7.40	7.76	6.80	5.34	3.67	2.06	1.42	53.62

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[1] In 1942 the station was moved to a new location and continued as the Newark Station. The new location is so near the Alvarado Station that the two records may be combined although records are published for both stations.

TABLE 21

TEMPERATURE AT ALVARADO (NEAR), ALAMEDA COUNTY, CALIFORNIA

Year	Mean temperature in °F. (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1924---	-------	-------	-------	-------	-------	-------	-------	61	61	58	53	45	-------
1925---	48	53	52	55	58	60	63	62	61	58	52	56	56
1926---	-------	-------	59	61	61	63	64	63	62	61	59	48	-------
1927---	50	53	53	55	58	58	63	62	62	60	56	49	56
1928---	48	52	57	56	59	62	62	61	62	58	53	47	56
1929---	46	48	53	53	57	63	64	63	62	60	53	52	56
1930--	48	54	55	58	57	61	61	63	62	60	54	47	57
1931---	50	55	56	58	64	63	65	63	62	58	51	47	58
1932---	47	49	55	55	57	61	63	63	65	61	59	46	57
1933---	47	51	56	58	58	62	65	65	63	65	57	52	58
1934---	53	57	62	61	65	65	65	66	65	63	58	53	61
1935---	51	54	53	60	62	66	65	64	64	62	55	52	59
1936---	54	54	58	60	65	65	66	67	67	62	54	48	60
1937---	42	49	55	55	59	65	64	63	64	62	56	52	57
1938---	51	52	53	56	58	61	63	64	63	60	53	52	57
1939---	49	49	54	59	61	62	64	63	69	63	55	51	58
1940---	52	54	58	60	60	63	65	64	66	62	54	53	59
1941---	52	54	57	55	63	63	67	66	66	62	57	53	60
Mean--	49	52	56	57	60	62	64	64	64	61	55	50	58

TABLE 22

WIND AT ALVARADO (NEAR), ALAMEDA COUNTY, CALIFORNIA

Year	Total wind in miles (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1925	2,181	3,205	4,415	4,180	5,107	5,420	5,710	5,430	4,820	3,170	3,160	2,730	49,528
1926	-------	-------	2,790	3,970	5,347	4,284	4,660	4,118	3,502	2,618	3,216	3,605	-------
1927	2,496	3,308	3,791	4,013	4,401	3,978	4,455	3,967	3,237	3,657	2,450	2,116	41,869
1928	1,826	4,460	3,403	3,834	4,142	3,709	4,176	4,068	3,116	2,956	2,187	1,793	39,670
1929	1,832	2,821	3,710	3,791	3,530	2,661	3,040	2,900	2,670	2,621	1,244	2,293	33,113
1930	2,431	2,360	3,179	4,600	4,224	3,996	4,160	4,890	3,290	2,345	2,295	1,637	39,407
1931	2,317	2,186	3,020	3,282	3,998	4,210	4,000	3,970	3,260	2,600	2,722	2,788	38,353
1932	3,502	2,478	2,840	3,590	3,810	4,020	3,100	2,860	2,790	2,490	1,805	1,810	35,095
1933	2,740	2,362	3,443	3,460	4,210	3,990	4,060	3,880	2,880	2,550	1,610	2,420	37,605
1934	1,460	2,060	2,210	3,380	3,720	3,440	3,820	3,470	2,780	2,590	2,000	1,891	32,821
1935	-------	1,990	3,070	2,710	2,830	2,620	2,580	2,870	2,850	2,530	1,690	1,490	-------
1936	2,110	2,990	2,780	2,910	3,180	2,840	3,080	3,330	2,510	2,200	1,040	1,660	30,630
1937	2,560	2,450	2,880	2,990	3,390	2,970	3,590	3,130	2,640	1,780	2,040	1,620	32,040
1938	1,890	3,110	3,350	2,650	3,140	3,170	3,190	2,820	2,210	2,040	1,570	1,140	30,280
1939	1,652	2,476	2,594	2,790	3,250	3,190	3,260	2,950	2,212	1,756	1,073	1,420	28,623
1940	2,079	2,412	2,286	2,440	3,024	2,621	2,819	2,684	2,152	1,859	1,200	2,333	27,909
1941	2,061	2,211	2,785	2,766	2,657	2,678	2,609	2,534	2,221	1,643	958	2,043	27,166
Mean	2,209	2,680	3,091	3,374	3,762	3,517	3,665	3,522	2,885	2,436	1,898	2,046	35,085

TABLE 23

EVAPORATION AT ALVISO (NEAR), SANTA CLARA COUNTY, CALIFORNIA

Station:
  Location ---------- At plant of Alviso Salt Company, south of San Francisco Bay, Lat. 37° 25′ N. Long. 121° 58′ W.
  Elevation ---------- 8 feet.
Evaporation pan:
  Type ---------- U. S. Weather Bureau pan.
  Description ---------- Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data ---------- Alviso Salt Company.
Publication reference ---------- California Dept. of Pub. Wks, Bul. No. 28 (29).
Meteorologic data ---------- None

Month	Evaporation in inches			Month	Evaporation in inches		
	1929	1930	Annual		1929	1930	Annual
January	----------	0.68	0.68	July	8.92	----------	8.92
February	----------	1.93	1.93	August	8.08	----------	8.08
March	----------	4.03	4.03	September	4.69	----------	4.69
April	5.10	5.75	5.42	October	4.42	----------	4.42
May	7.67	7.35	7.51	November	2.34	----------	2.34
June	7.91	----------	7.91	December	1.89	----------	1.89
Mean	----------	----------	57.82	Mean	----------	----------	57.82

TABLE 24

EVAPORATION AT ARBUCKLE, COLUSA COUNTY, CALIFORNIA

Station:
  Location ------------------At Emergency Rubber Project, Forest Service, U. S. D. A. Camp Arbuckle on the west side of the town of Arbuckle, Lat. 39° 01′ N., Long. 122° 04′ W.
  Elevation ------------------145 feet.
Evaporation pan:
  Type ------------------U. S. Weather Bureau pan.
  Description ------------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data------------------Emergency Rubber Project, Forest Service, U. S. D. A.
Publication reference ------------------None.
Meteorologic data ------------------Temperature.

Month	Evaporation inches	Temperature ° F.	Month	Evaporation inches	Temperature ° F.
1945			1945		
January	1.45	45	July	14.36	79
February	3.47	51	August	12.54	74
March	2.54	------	September	11.36	75
April	------	------	October	6.80	65
May	8.16	63	November	2.56	51
June	14.26	75	December	------	------
Mean	------	------	Mean	------	------

TABLE 25

EVAPORATION AT ASCOT COVERED RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ------------------About one mile northeast of Lincoln Park, Los Angeles, Lat. 34° 04′ N., Long. 118° 11′ W.
  Elevation ------------------605 feet.
Evaporation pan:
  Type ------------------Floating pan.
  Description ------------------Square, 2 x 2 feet, depth 8 inches.
Authority for data------------------Los Angeles Dept. of Water and Power.
Publication reference ------------------None.
Meteorologic data ------------------Water temperature.

Year	Evaporation in inches[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	2.00	2.19	1.63	1.51	1.88	1.56	1.72	1.57	1.88	2.46	2.17	1.88	22.45
1940	1.70	1.60	1.74	1.50	1.56	1.76	1.88	1.47	1.52	2.03	2.33	1.93	21.02
1941	1.70	1.25	1.30	1.40	1.60	1.80	1.85	1.90	2.15	1.85	1.90	1.20	19.90
1942	.95	1.70	1.85	1.60	2.20	2.15	2.10	1.65	2.10	2.25	2.15	2.40	23.10
1943	2.35	1.25	1.30	1.80	2.10	2.10	2.05	2.10	2.10	2.35	2.65	1.95	24.10
1944	1.90	1.65	1.75	2.25	2.00	2.15	2.25	2.25	2.15	2.10	2.20	2.50	25.15
1945	2.20	1.98	2.05	2.15	2.50	2.20	2.50	------	------	------	------	------	------
Mean	1.83	1.66	1.66	1.74	1.98	1.96	2.05	1.82	1.98	2.17	2.23	1.98	23.06

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[1] The low evaporation is caused by the roof protecting the water from sun and wind.

TABLE 26

WATER TEMPERATURE AT ASCOT COVERED RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Year	Mean temperature in °F[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	-------	58	61	64	66	69	71	-------	71	69	66	65	-------
1940	62	-------	62	65	-------	69	71	73	70	69	64	62	-------
1941	60	61	61	63	-------	69	73	73	70	68	66	60	-------
1942	57	58	60	62	67	66	72	72	70	69	65	61	65
1943	60	60	62	64	68	69	72	73	71	70	66	60	66
1944	57	59	60	65	67	69	70	71	72	68	65	61	65
1945	60	61	60	64	67	69	73	-------	-------	-------	-------	-------	-------
Mean	59	60	61	64	67	69	72	72	71	69	65	62	66

[1] These data are not strictly mean water temperatures as they represent spot readings not always taken at the same time of day and are not average maximum and minimum temperatures.

TABLE 27

EVAPORATION NEAR AZUSA, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ____________________In San Gabriel River Valley near Azusa. Lat. 34° 08′ N., Long. 117° 55′ W.
Elevation ____________________675 feet.
Evaporation pan:
Type ____________________Ground pan.
Description ____________________Diameter 6 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data____________________San Gabriel Valley Protective Association.
Publication reference ____________________Calif. Dept. of Pub. Wks. Bul. No. 44 (6).
Meteorologic data ____________________None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	1.84	2.44	3.40	4.07	4.32	5.29	7.50	6.38	4.75	4.70	4.22	3.28	52.19
1931	2.18	2.20	4.91	4.90	5.69	6.26	8.28	7.16	6.28	4.66	3.22	1.84	57.58
Mean	2.01	2.32	4.16	4.49	5.00	5.78	7.89	6.77	5.52	4.68	3.72	3.56	54.90

TABLE 28

EVAPORATION AT BACKUS RANCH, KERN COUNTY, CALIFORNIA

Station:
  Location ------------------ Eight miles south of Mojave in Mojave Desert. Lat. 34° 57′ N., Long. 118° 10′ W.[1]
  Elevation ------------------ 2620 feet.
Evaporation pan:
  Type ---------------------- U. S. Weather Bureau pan.
  Description --------------- Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data ------------ U. S. Weather Bureau.
Publication reference --------- U. S. Weather Bureau Climatological Data (41).
Meteorologic data ------------ Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1936	-------	-------	-------	-------	-------	18.50	19.46	-------	-------	8.67	5.23	3.50	-------
1937	-------	-------	-------	9.30	14.86	17.17	20.70	21.06	14.69	8.42	5.23	3.95	-------
1938	3.96	3.06	5.58	10.31	12.74	17.61	20.26	18.67	13.75	7.59	5.31	-------	-------
1939	2.64	4.59	5.26	10.20	13.95	18.30	21.51	22.04	10.65	7.38	4.05	3.42	123.99
1940	2.38	3.67	7.79	9.73	15.32	20.36	21.09	20.54	11.90	8.56	4.50	2.95	128.79
1941	2.70	2.35	5.11	6.99	12.83	16.05	18.23	15.88	12.41	6.94	3.88	2.16	105.53
1942	2.88	4.04	6.98	8.26	13.31	19.56	18.86	17.32	12.64	8.92	5.22	3.80	121.79
1943	3.26	3.74	6.24	9.01	14.86	14.24	17.49	17.47	12.68	7.30	4.15	2.58	113.02
1944	2.31	3.13	7.05	9.20	11.97	12.23	16.42	17.35	13.67	7.06	3.07	-------	-------
1945	2.99	4.02	4.74	10.46	12.36	15.31	19.06	14.48	11.54	6.52	4.37	2.76	108.61
Mean	2.89	3.58	6.09	9.27	13.58	16.93	19.31	18.31	12.66	7.74	4.50	3.14	118.00

[1] The Backus Ranch lies 8 miles south of Mojave and 2 miles south of Mt. Soledad in a valley 6 miles long and 3 miles wide. Ground around the station is nearly level.

TABLE 29

TEMPERATURE AT BACKUS RANCH, KERN COUNTY, CALIFORNIA

Year	Mean temperature in °F (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1937	32	44	50	56	70	76	84	85	77	63	54	48	62
1938	46	44	48	58	66	76	84	81	77	61	47	-------	-------
1939	45	42	51	63	68	76	85	85	72	61	54	49	62
1940	47	47	56	60	72	82	82	84	71	65	49	48	64
1941	45	48	51	54	66	73	82	79	69	59	53	44	60
1942	44	43	49	56	64	75	85	83	73	65	54	48	62
1943	44	48	53	60	69	70	81	80	77	63	51	44	62
1944	50	47	54	56	63	65	75	80	74	67	-------	-------	-------
1945	44	47	50	58	64	74	86	80	74	-------	-------	-------	-------
Mean	44	46	51	58	67	74	83	82	74	63	52	47	62

TABLE 30

WIND AT BACKUS RANCH, KERN COUNTY, CALIFORNIA

Year	Total wind in miles (41)[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1936	-------	-------	-------	-------	-------	4,755	3,605	-------	-------	2,183	876	1,574	-------
1937	1,987	-------	-------	2,982	2,985	3,827	3,306	3,486	2,285	1,841	1,486	1,161	-------
1938	1,423	1,336	3,694	3,162	3,360	3,530	3,440	3,029	2,348	2,009	1,654	-------	-------
1939	1,469	2,390	1,914	2,528	3,496	2,982	3,350	2,939	1,689	1,629	431	1,159	25,976
1940	987	2,308	3,274	3,878	3,809	3,955	3,903	3,544	2,160	2,150	1,436	828	32,232
1941	1,583	1,087	1,846	2,511	3,495	3,357	2,199	3,001	2,680	1,877	1,023	2,239	26,898
1942	1,203	1,803	2,536	3,487	4,365	5,128	2,501	2,756	2,042	2,160	1,859	1,883	31,723
1943	1,688	1,398	2,679	3,510	4,110	3,491	2,693	1,688	731	1,369	802	1,471	25,630
1944	1,088	1,627	3,178	4,138	2,829	3,178	2,462	2,782	2,479	1,295	1,564	897	27,517
1945	1,607	2,748	3,247	3,482	3,672	3,622	2,908	1,915	1,721	1,840	2,523	1,794	31,079
Mean	1,448	1,837	2,799	3,298	3,569	3,782	3,037	2,642	2,015	1,835	1,366	1,398	28,026

[1] Anemometer cups two inches above top of pan.

TABLE 31

EVAPORATION AT BALDWIN PARK, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ------------------ On Scott Place in Baldwin Park. Lat. 34° 06′ N., Long. 117° 58′ W.
Elevation ------------------ 387 feet.
Evaporation pan:
Type ------------------ Ground pan.
Description ------------------ Diameter 2 feet, depth 3 feet, set in ground, 2.75 feet.
Authority for data ------------------ Los Angeles County Flood Control District.[1]
Publication reference ------------------ Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------------ Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
	Water surface in evaporation pan about 1″ above ground level												
1932	-------	-------	-------	-------	-------	-------	9.31	9.40	6.56	5.63	4.80	2.44	-------
1933	2.21	3.14	4.88	5.82	7.75	9.08	10.10	9.41	6.59	4.99	4.05	1.74	69.76
1934	1.72	1.62	4.33	6.36	9.06	6.80	9.78	8.92	7.98	4.25	2.65	2.19	65.66
1935	1.77	2.71	3.09	4.39	6.38	8.52	10.19	9.64	7.34	6.12	3.42	2.45	66.02
1936	2.32	2.08	3.68	4.70	8.49	9.76	10.29	9.56	7.56	5.11	4.04	1.96	69.55
1937	1.41	2.06	3.84	5.82	6.04	8.32	10.17	10.21	8.21	5.09	2.98	2.33	66.48
Mean	1.89	2.32	3.96	5.42	7.54	8.50	9.97	9.52	7.37	5.20	3.66	2.18	67.53
	Water surface in evaporation pan at ground level												
1938	2.50	1.95	3.38	4.70	6.74	7.32	8.98	8.86	7.42	5.20	4.06	2.42	63.53
1939	1.88	[2]3.12	[2]2.94	4.61	6.50	8.57	9.06	8.46	[2]7.14	4.66	2.92	2.30	62.16
1940	[3]1.20	[3]2.26	3.46	4.52	6.59	7.04	9.21	8.37	7.01	5.05	2.83	2.02	59.56
1941	1.41	1.47	2.96	3.52	7.04	6.66	8.50	7.30	6.40	4.52	2.85	1.35	53.98
1942	1.40	2.01	3.78	3.36	5.74	6.14	9.14	8.27	6.12	4.82	2.90	2.06	55.74
1943	1.76	2.00	2.38	3.87	6.56	7.44	8.93	8.38	7.08	4.93	3.58	2.03	58.94
1944	1.58	1.82	3.48	5.00	5.89	6.38	7.86	8.58	5.90	3.54	2.14	1.76	53.93
1945	1.73	1.69	2.55	4.61	5.57	5.06	-------	6.45	6.43	5.05	3.04	2.04	-------
Mean	1.68	2.04	3.12	4.27	6.33	6.83	8.81	8.08	6.69	4.72	3.04	2.00	57.61

[1] In cooperation with Div. of Irrig., SCS, U. S. Dept. of Agric., City of Pasadena Water Department, U. S. Geological Survey, San Gabriel Valley Protective Association and State of California, Department of Public Works, Division of Water Resources.

[2] Incomplete.

[3] Partly estimated.

TABLE 32

EVAPORATION AT BALDWIN PARK, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	On Scott Place in Baldwin Park, Lat. 34° 06′ N., Long. 117° 58′ W.*
Elevation	387 feet.
Evaporation pan:	
Type	Ground pan.
Description	Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data	Los Angeles County Flood Control District.[1]
Publication reference	Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	1.83	1.81	4.13	6.05	8.52	6.51	9.32	8.30	7.27	4.26	2.66	2.23	62.89
1935	1.70	2.64	2.90	4.07	5.70	7.12	9.13	8.57	6.41	5.28	2.99	2.19	58.70
1936	2.05	1.89	3.12	4.05	7.29	8.11	8.48	7.80	6.31	4.50	3.41	1.90	58.91
1937	1.29	1.98	3.34	5.00	5.11	7.17	8.96	8.48	7.36	4.84	2.94	2.44	58.91
1938	2.28	2.02	3.07	4.31	6.11	6.86	8.56	8.24	7.03	5.14	3.91	2.49	60.02
1939	1.91	2.74	2.93	4.68	6.34	8.25	9.04	8.30	6.95	4.65	2.97	2.37	61.13
1940	[2]1.23	2.34	3.43	[2]4.54	6.54	6.99	9.13	8.21	6.96	5.09	2.92	1.93	59.31
1941	1.47	1.56	2.96	3.69	6.85	6.42	8.22	7.00	6.46	4.71	3.07	1.78	54.19
1942	1.73	2.03	3.80	3.29	5.77	6.17	9.11	8.19	6.25	5.02	2.88	3.90	58.14
1943	1.81	1.97	2.17	3.79	6.35	7.52	8.83	8.39	7.20	5.17	3.71	2.04	58.95
1944	1.59	2.22	3.40	5.09	5.94	6.18	7.93	8.69	6.03	3.67	2.18	1.87	54.79
1945	1.32	1.93	2.63	4.53	5.98	5.12	7.73	6.14	6.36	4.15	3.09	2.03	51.01
Mean	1.68	2.09	3.16	4.42	6.38	6.87	8.70	8.03	6.72	4.71	3.06	2.26	58.08

* Station surrounded by orange groves and three small houses within 100 feet of evaporation pan.

[1] In cooperation with Div. of Irrig., SCS., U. S. Dept. of Agric., City of Pasadena Water Department, U. S. Geological Survey, San Gabriel Valley Protective Association and State of California, Department of Public Works, Division of Water Resources.

[2] Partly estimated.

TABLE 33

EVAPORATION AT BALDWIN PARK, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ------------------On Scott Place in Baldwin Park, Lat. 34° 06′ N., Long. 117° 58′ W.*
  Elevation ------------------387 feet.
Evaporation pan:
  Type ----------------------Ground pan.
  Description ---------------Diameter 6 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data-------------Los Angeles County Flood Control District.[1]
Publication reference ---------Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932---	-------	-------	-------	-------	-------	-------	7.47	7.26	4.81	4.43	4.06	2.22	-------
1933---	1.89	3.49	3.61	4.16	6.43	6.89	7.75	6.87	4.95	4.01	3.11	[2]1.36	54.52
1934---	[2]1.58	1.55	3.57	5.03	7.23	5.43	7.78	7.11	6.04	3.43	2.13	1.71	52.59
1935---	1.41	2.22	2.48	3.51	4.91	6.22	7.78	7.22	5.46	4.60	2.62	1.84	50.27
1936---	1.77	1.70	2.93	3.81	6.49	7.26	7.54	7.04	5.60	3.81	2.96	1.59	52.50
1937---	1.05	1.74	3.09	4.67	4.51	6.29	7.72	7.37	6.28	4.11	2.32	1.96	51.11
1938---	1.99	1.72	2.99	3.97	5.42	6.04	7.43	7.13	5.96	4.24	3.23	2.19	52.31
1939---	1.54	2.52	2.65	4.14	5.51	7.19	7.68	7.19	[3]5.96	4.11	2.37	1.94	52.80
1940---	[3]1.09	2.16	3.06	3.90	5.68	5.96	7.76	6.88	5.80	4.36	2.53	1.67	50.85
1941---	1.33	1.48	2.70	3.34	5.99	5.69	7.24	6.05	5.49	3.91	2.58	1.35	47.15
1942---	1.52	1.77	3.47	3.06	5.89	5.54	7.87	7.23	5.28	4.28	2.44	1.72	50.07
1943---	1.58	1.82	2.12	3.60	5.68	6.40	7.70	7.21	6.10	4.17	2.93	1.69	51.00
1944---	1.40	2.60	3.16	4.47	5.30	5.78	6.94	7.53	5.04	2.83	1.88	1.48	48.41
Mean--	1.51	2.06	2.98	3.97	5.75	6.22	7.59	7.08	5.60	4.02	2.70	1.75	51.23

* Station surrounded by orange groves and small houses.

[1] In cooperation with Div. of Irrig., SCS., U. S. Dept. of Agric., City of Pasadena Water Department, U. S. Geological Survey, San Gabriel Valley Protective Association and State of California, Department of Public Works, Division of Water Resources.

[2] Incomplete.

[3] Partly estimated.

TABLE 34

EVAPORATION AT BALDWIN PARK, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ------------------ On Scott Place in Baldwin Park. Lat. 34° 06′ N., Long. 117° 58′ W.*
Elevation ------------------ 387 feet.
Evaporation pan:
Type ------------------ U. S. Weather Bureau pan.
Description ------------------ Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data ------------------ Los Angeles County Flood Control District.[1]
Publication reference ------------------ Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------------ Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	-------	-------	-------	-------	-------	-------	8.30	8.02	5.64	5.00	4.23	2.07	-------
1933	2.47	2.38	4.79	5.28	6.89	8.15	9.49	8.53	5.64	4.80	4.14	1.86	64.42
1934	2.40	2.36	4.56	5.97	8.39	6.38	9.44	8.32	7.32	4.43	2.49	2.21	64.27
1935	1.94	2.94	3.20	4.45	5.92	7.48	9.40	8.82	6.66	5.64	3.28	2.38	62.11
1936	2.45	2.36	3.78	4.94	7.78	8.92	8.98	8.35	6.67	4.78	3.85	2.00	64.86
1937	1.46	2.37	4.02	5.77	5.25	7.78	9.07	8.22	7.13	4.70	2.75	2.51	61.03
1938	2.64	2.53	3.78	4.78	6.69	6.86	8.79	8.47	7.11	4.67	3.57	2.61	62.50
1939	2.01	3.18	3.38	4.98	6.34	8.32	8.94	8.53	7.47	4.88	2.90	2.39	63.32
1940	[2]1.50	2.82	3.93	4.89	6.69	6.66	8.95	7.83	6.66	5.01	2.98	2.34	60.26
1941	1.88	2.07	3.63	4.29	7.48	6.51	8.41	6.91	6.12	4.53	3.13	2.06	57.02
1942	-------	-------	4.41	3.71	6.99	6.49	9.31	8.06	5.99	5.06	3.73	2.21	-------
1943	2.26	2.80	2.65	4.27	6.74	7.46	8.89	8.55	6.98	4.74	3.48	2.08	60.90
1944	2.10	2.44	4.09	5.08	6.00	6.09	7.85	8.27	5.69	3.94	2.32	2.06	55.93
Mean	2.10	2.57	3.85	4.87	6.76	7.26	8.91	8.22	6.54	4.78	3.30	2.21	61.37

* Station surrounded by orange groves and small houses.

[1] In cooperation with Div. of Irrig., SCS., U. S. Dept. of Agric., City of Pasadena Water Department, U. S. Geological Survey, San Gabriel Valley Protective Association and State of California, Department of Public Works, Division of Water Resources.

[2] Partly estimated.

TABLE 35

TEMPERATURE AT BALDWIN PARK, LOS ANGELES COUNTY, CALIFORNIA

Year	Mean temperature in ° F. (46)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	-------	-------	-------	-------	-------	-------	72	72	70	66	64	50	-------
1933	50	52	56	59	60	67	74	74	66	67	62	54	62
1934	54	57	63	64	68	66	74	73	72	65	58	55	64
1935	53	55	52	58	62	70	72	76	71	64	56	54	62
1936	54	53	57	60	65	70	76	74	70	65	60	53	63
1937	43	52	54	59	64	68	74	73	72	65	58	56	62
1938	54	53	54	58	63	67	72	74	74	64	56	56	62
1939	51	49	54	62	62	68	72	73	75	66	62	58	63
Mean	51	53	56	60	63	68	73	74	71	65	60	54	62

TABLE 36

WIND MOVEMENT AT BALDWIN PARK, LOS ANGELES COUNTY, CALIFORNIA

Year	Total wind in miles (46)*												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	-------	-------	-------	-------	-------	-------	1,032	1,241	1,082	1,111	844	865	-------
1933	1,010	1,038	1,041	1,091	1,269	1,248	1,414	1,362	1,008	883	592	739	12,695
1934	620	696	772	952	1,231	1,147	1,236	1,180	941	682	481	538	10,476
1935	680	550	624	828	889	1,088	1,189	1,233	1,055	877	600	569	10,182
1936	492	671	778	795	1,198	1,268	1,340	1,162	985	893	743	695	11,020
1937	741	695	831	728	777	1,105	1,165	1,122	942	809	561	540	10,016
1938	654	731	973	738	1,069	1,193	1,024	729	669	714	465	-------	-------
1939	-------	857	[1]730	1,063	1,199	1,313	1,333	1,218	996	696	412	403	-------
Mean	700	748	821	885	1,090	1,195	1,217	1,156	956	833	587	607	10,795

* Anemometer 6 inches above top of Weather Bureau pan.

[1] 23 days only.

TABLE 37

EVAPORATION AT BARRETT RESERVOIR, SAN DIEGO COUNTY, CALIFONIA

Station:
  Location ____________________On Cottonwood Creek, a tributary of Tia Juana River, Lat. 32° 41′ N., Long. 116° 40′ W.
  Elevation ____________________1,600 feet.
Evaporation pan:
  Type ________________________Ground pan.
  Description _________________Square, 3 x 3 feet, depth 18 inches, set in ground.
Authority for data_____________San Diego Water Department, Division of Water Development and Conservation.
Publication reference _________None.
Meteorologic data _____________None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1926	-------	-------	-------	-------	-------	-------	-------	-------	7.61	5.74	4.43	-------	-------
1927	1.68	-------	3.60	3.87	7.74	8.18	10.85	9.78	7.70	5.73	2.16	2.51	-------
1928	2.09	2.66	3.67	6.09	7.74	9.47	10.68	10.23	9.52	6.01	3.89	1.79	73.84
1929	1.84	1.90	3.36	4.17	8.32	9.47	10.59	10.05	7.43	6.54	4.67	3.25	71.60
1930	.95	2.92	4.08	5.67	5.43	8.67	10.63	9.16	7.25	5.47	3.59	2.54	66.36
1931	1.82	2.51	5.19	5.41	7.85	8.94	10.26	-------	-------	-------	-------	-------	-------
1932	-------	-------	-------	5.54	6.89	8.34	10.10	9.92	7.56	5.47	4.31	-------	-------
1933	1.09	2.46	4.42	4.12	5.93	8.04	8.93	9.43	7.30	5.50	4.35	1.67	63.24
1934	2.49	2.01	4.90	6.51	9.30	8.09	10.18	9.46	8.02	5.60	2.91	2.04	71.51
1935	1.57	2.08	2.84	3.92	6.73	9.21	9.96	9.20	6.36	5.08	2.65	2.29	61.89
1936	1.98	1.81	3.41	4.68	7.57	9.25	10.91	9.87	8.90	5.98	4.32	3.55	72.23
1937	1.07	2.78	2.77	5.12	6.73	9.12	10.55	10.85	9.65	6.67	3.55	2.81	71.67
1938	2.69	1.69	-------	4.35	6.37	8.72	10.56	9.87	8.76	5.36	4.84	1.14	-------
1939	1.25	2.60	3.37	5.35	6.80	8.85	10.22	9.82	5.20	5.16	3.07	2.43	64.12
1940	1.52	1.84	4.78	4.69	9.25	10.05	11.92	10.59	7.43	5.84	2.58	2.05	72.54
1941	1.69	1.79	2.76	2.74	7.28	8.76	10.91	9.61	7.37	3.90	3.35	1.23	61.39
1942	2.02	1.90	3.71	3.19	7.34	9.43	12.10	11.12	8.90	6.37	4.05	2.48	72.61
1943	1.63	2.86	3.56	4.64	9.07	9.25	10.94	9.92	9.13	5.81	4.74	2.08	73.63
1944	1.85	-------	3.59	4.94	7.36	7.48	10.41	11.18	8.00	6.18	-------	2.48	-------
1945	1.90	2.49	-------	5.57	8.23	8.48	10.90	8.97	7.85	5.65	3.59	3.62	-------
Mean	1.73	2.27	3.75	4.77	7.47	8.83	10.61	9.95	7.89	5.69	3.72	2.35	69.03

TABLE 38

EVAPORATION AT BARRETT RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
Location ____________________On Cottonwood Creek, a tributary of Tia Juana River, Lat. 32° 41′ N., Long. 116° 41′ W.
Elevation ____________________1,600 feet.
Evaporation pan:
Type ____________________Floating pan.
Description ____________________Square, 3 x 3 feet, depth 18 inches.
Authority for data____________________San Diego Water Department, Division of Water Development and Conservation.
Publication reference ____________________None.
Meteorologic data ____________________None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1926	-------	-------	-------	-------	-------	-------	-------	-------	7.61	6.18	3.94	-------	-------
1927	1.90	-------	3.74	3.74	7.39	7.52	10.32	9.56	7.65	6.44	3.59	2.73	-------
1928	2.49	2.80	3.71	6.26	-------	-------	-------	-------	-------	8.10	3.63	2.27	-------
1929	2.34	2.12	2.69	3.77	8.14	7.70	9.21	9.03	7.25	6.63	5.07	3.34	67.29
1930	.59	2.61	2.83	5.18	5.08	7.70	9.47	8.32	7.03	5.43	3.37	2.98	60.59
1931	1.60	2.37	4.92	5.23	7.22	8.18	9.19	8.67	7.70	4.76	2.42	-------	-------
1932	-------	-------	-------	5.76	6.63	7.99	9.70	9.65	7.65	6.41	4.76	-------	-------
1933	1.49	2.82	4.46	4.52	6.07	8.35	9.33	10.10	8.19	6.17	4.75	2.42	68.67
1934	2.80	1.88	4.99	6.82	9.07	8.31	9.83	9.28	7.84	5.56	3.49	2.17	72.04
1935	1.66	2.30	3.15	4.41	6.82	9.47	9.56	9.34	6.36	5.93	2.74	2.29	64.03
1936	2.11	1.90	3.99	4.68	8.15	9.61	10.25	9.29	8.32	5.18	3.69	3.55	70.72
1937	1.16	2.24	2.46	4.90	6.77	8.76	10.55	10.72	9.61	6.63	3.55	2.76	70.11
1938	2.60	1.34	-------	5.21	6.19	-------	9.80	-------	-------	5.40	4.84	1.28	-------
1939	1.52	2.60	3.28	5.35	6.76	8.45	9.11	9.11	4.80	4.98	2.98	2.34	61.28
1940	1.30	1.61	4.47	4.38	8.63	9.52	11.48	9.78	6.89	5.30	3.49	1.87	68.72
1941	1.69	1.43	2.67	2.70	7.05	8.23	10.25	9.12	7.05	3.76	3.26	1.23	58.44
1942	2.15	1.85	3.62	3.24	7.34	9.16	11.16	10.76	8.67	5.84	3.83	2.08	69.70
1943	1.45	2.77	3.52	4.15	8.81	8.94	10.59	9.52	8.74	5.72	4.61	1.50	70.32
1944	2.56	-------	3.54	5.16	6.61	7.77	10.18	11.01	8.63	7.25	-------	3.57	-------
1945	2.52	2.17	-------	5.48	8.01	7.95	9.87	8.56	8.34	6.58	4.62	4.20	-------
Mean	1.88	2.18	3.63	4.79	7.26	8.45	9.99	9.52	7.68	5.91	3.82	2.49	67.60

TABLE 39

EVAPORATION AT BEAUMONT, RIVERSIDE COUNTY, CALIFORNIA

Station:
Location ____________________Two miles east of Beaumont in San Gorgonio Pass. Lat. 33° 56′ N., Long. 116° 56′ W.[1]
Elevation ____________________2,589 feet.
Evaporation pan:
Type ____________________U. S. Weather Bureau pan.
Description ____________________Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data____________________Div. of Irrig., SCS, U. S. Dept. of Agric.
Publication reference ____________________U. S. Weather Bureau Climatological Data (41).
Meteorologic data ____________________Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	-------	-------	-------	-------	-------	-------	13.45	13.96	8.84	10.07	6.44	4.93	-------
1940	-------	-------	-------	-------	-------	12.47	15.00	13.70	9.38	8.01	6.85	4.10	-------
1941	2.62	2.21	4.50	4.10	8.57	8.53	13.65	10.23	9.23	5.69	6.24	2.94	78.51
1942	4.82	3.90	6.83	4.73	9.72	12.10	16.25	12.90	10.40	7.62	6.52	5.06	100.85
1943	4.54	5.49	4.04	5.55	9.89	10.91	13.04	12.43	10.70	7.18	7.77	3.33	94.87
1944	4.75	2.19	6.61	5.95	8.71	8.68	12.97	14.02	10.39	7.91	3.31	4.99	90.48
1945	3.20	3.82	3.60	6.41	8.24	9.43	12.84	10.26	8.89	7.05	5.66	4.33	83.73
Mean	3.99	3.52	5.12	5.35	9.03	10.35	13.88	12.50	9.69	7.65	6.11	4.24	91.43

[1] Exposure of station good except for a small building 25 feet south.

TABLE 40

TEMPERATURE AT BEAUMONT, RIVERSIDE COUNTY, CALIFORNIA

Year	Mean temperature in ° F. (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	-------	-------	-------	-------	-------	-------	-------	77	71	63	59	54	-------
1940	50	49	55	57	66	72	74	75	68	64	54	52	61
1941	48	50	52	52	64	66	76	72	66	59	57	47	59
1942	49	45	50	54	60	68	78	76	68	62	56	50	60
1943	48	51	52	57	63	65	74	75	74	64	57	47	60
1944	45	43	51	52	59	62	71	75	71	63	50	50	58
1945	48	47	46	54	59	66	77	76	72	63	52	47	59
Mean	48	48	51	54	62	66	75	75	70	63	55	50	50

TABLE 41

WIND MOVEMENT AT BEAUMONT, RIVERSIDE COUNTY, CALIFORNIA

Year	Total wind in miles (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1941	3,096	2,396	2,415	1,679	2,248	2,647	2,553	2,398	2,221	2,498	-------	2,888	-------
1942	3,132	2,460	3,418	2,785	2,983	2,775	2,628	2,578	2,253	2,580	2,880	2,900	33,372
1943	3,204	3,513	2,537	1,960	2,382	2,400	2,102	1,932	1,685	1,966	2,898	3,223	29,802
1944	3,363	2,219	3,377	2,463	2,679	2,499	2,307	2,373	2,473	2,028	2,606	3,335	31,722
1945	2,467	2,129	2,473	2,101	2,092	2,019	1,779	1,687	1,694	2,245	2,329	2,845	25,860
Mean	3,052	2,543	2,844	2,198	2,477	2,468	2,270	2,194	2,065	2,263	2,678	3,048	30,100

TABLE 42

EVAPORATION AT BERKELEY, ALAMEDA COUNTY, CALIFORNIA

Station:	
Location	Lat. 37° 52′ N., Long. 122° 16′ W.
Elevation	317 feet.
Evaporation pan:	
Type	Ground pan.
Description	Circular; diameter between 22 and 36 inches, depth 30 inches, set in ground 29 inches.
Authority for data	U. S. Dept. of Agric., Office of Exp. Sta.
Publication reference	U. S. Dept. of Agric., Office of Exp. Sta., Bull. 177 (13).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1904	-------	-------	-------	-------	-------	-------	-------	-------	-------	2.84	1.44	1.01	-------
1905	1.00	1.36	2.11	3.14	4.70	5.68	5.52	5.09	4.65	4.27	2.68	1.35	41.55

TABLE 43

EVAPORATION AT BERKELEY, ALAMEDA COUNTY, CALIFORNIA

Station:
  Location ------------------Shelter No. 1, in open space in brush area in Strawberry Canyon on University of California Campus. Lat. 37° 52′ N., Long. 122° 15′ W.[1]
  Elevation ------------------820 feet.
Evaporation pan:
  Type ----------------------U. S. Weather Bureau pan.
  Description ---------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data------------California Forest and Range Experiment Station.
Publication reference ---------None.
Meteorologic data ------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	-------	-------	-------	-------	-------	-------	-------	5.04	4.86	3.49	1.63	0.92	-------
1940	1.09	1.17	2.19	3.24	4.05	5.22	5.66	4.35	3.50	2.67	1.61	.99	35.74
1941	.86	1.01	2.48	2.61	4.07	4.85	5.25	4.52	4.39	2.68	1.16	-------	-------
Mean	.98	1.09	2.34	2.92	4.06	5.04	5.46	4.64	4.25	2.95	1.47	.96	36.16

[1] Location at thermometer shelter No. 1 on sloping ground, in open space surrounded by brush and oak cover.

TABLE 44

EVAPORATION AT BERKELEY, ALAMEDA COUNTY, CALIFORNIA

Station:
  Location ------------------Shelter No. 1 in open space in brush area in Strawberry Canyon on University of California Campus. Lat. 37° 52′ N., Long. 122° 15′ W.[1]
  Elevation ------------------820 feet.
Evaporation pan:
  Type ----------------------Ground pan, insulated.
  Description ---------------Diameter 25.23 inches, depth 14 inches, rim of pan one inch above water surface, insulated with six inches of glass wool on sides, sawdust on bottom.
Authority for data------------California Forest and Range Experiment Station.
Publication reference ---------None.
Meteorologic data ------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	-------	-------	-------	-------	3.31	5.31	5.95	4.80	3.87	3.41	2.42	1.69	-------
1933	1.08	2.07	2.71	4.26	4.83	5.56	6.55	4.89	3.73	4.87	3.04	1.14	44.73
1934	1.42	1.66	3.05	4.45	5.38	5.76	6.48	5.60	5.48	3.48	1.98	1.67	46.41
1935	1.43	1.92	2.79	3.65	5.48	6.85	6.87	6.01	4.08	3.55	2.11	1.42	46.16
1936	2.22	1.79	3.68	4.07	6.37	6.35	7.37	6.08	5.38	3.63	2.44	1.31	50.69
1937	1.08	1.63	2.22	3.63	5.95	5.64	5.12	6.09	4.37	3.32	1.83	1.15	42.03
1938	1.40	1.37	2.23	3.05	5.40	5.99	6.22	5.82	4.41	2.66	2.47	1.41	42.43
1939	1.27	2.14	2.01	4.66	5.31	6.79	6.62	.56	5.20	3.71	1.90	1.14	46.31
1940	1.11	1.30	2.31	3.33	4.45	5.58	6.17	4.74	3.79	2.81	1.74	1.03	38.36
1941	.97	1.01	2.67	2.74	4.30	5.13	5.42	4.64	4.65	-------	-------	-------	-------
Mean	1.33	1.65	2.63	3.76	5.08	5.90	6.28	5.42	4.50	3.49	2.21	1.33	43.58

[1] Location at thermometer shelter No. 1 on sloping ground, in open space surrounded by brush and oak cover.

TABLE 45

TEMPERATURE AT BERKELEY, ALAMEDA COUNTY, CALIFORNIA

Year	Mean temperature in ° F.[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	------	------	------	------	------	------	------	------	------	61	60	42	------
1933	42	46	51	52	52	57	62	62	62	64	60	48	55
1934	49	52	58	57	59	61	62	63	66	61	54	50	58
1935	46	50	47	54	56	62	62	62	60	58	52	50	55
1936	50	49	55	56	60	61	64	64	66	63	57	47	58
1937	37	45	51	51	57	60	64	63	62	62	54	50	55
1938	48	48	47	52	56	58	61	62	63	------	------	------	------
Mean	45	48	52	54	57	60	62	63	63	62	56	48	56

[1] Thermometer shelter No. 1 on sloping ground in open space, surrounded by brush and oak cover.

TABLE 46

WIND MOVEMENT AT BERKELEY, ALAMEDA COUNTY, CALIFORNIA*

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	------	------	------	------	------	------	------	------	------	1,328	1,192	1,408	------
1933	1,421	1,329	1,306	1,380	1,415	1,257	1,121	1,059	1,152	1,018	1,446	1,277	15,181
1934	1,220	1,083	1,043	1,054	1,118	1,160	1,189	1,089	1,101	1,080	893	1,247	13,277
1935	1,329	1,120	1,295	1,135	1,227	948	952	814	737	917	897	977	12,348
1936	1,144	1,036	1,085	928	1,022	799	689	697	730	784	835	788	10,537
1937	970	718	726	884	864	735	636	624	654	679	716	892	9,098
1938	979	876	999	697	685	604	524	614	492	624	921	962	8,977
1939	733	778	649	538	719	676	563	[1]538	544	748	638	707	7,831
1940	985	785	689	654	686	491	510	430	474	505	708	1,146	8,063
1941	798	842	908	673	825	664	422	388	375	491	477	615	7,478
Mean	1,064	952	967	882	951	815	734	695	695	817	872	1,002	10,446

* Anemometer was located in an open space in surrounding brush cover, with cups at height of water surface in evaporation pan.

[1] Open space enlarged by cutting brush in August, 1939.

TABLE 47

EVAPORATION AT BERKELEY, ALAMEDA COUNTY, CAIFORNIA

Station:
  Location ------------------Shelter No. 2 in stand of maritime pine in Strawberry Canyon on University of California Campus, pan in shade under cover of tree tops on 15 percent slope. Lat. 37° 52′ N., Long. 122° 15′ W.
  Elevation ------------------850 feet.
Evaporation pan:
  Type ------------------Insulated pan.
  Description ------------------Diameter 25.23 inches, depth 14 inches, rim of pan one inch above water surface, insulated with six inches of glass wool on sides, sawdust on bottom.
Authority for data------------California Forest and Range Experiment Station.
Publication reference ---------None.
Meteorologic data ------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932---	-------	-------	-------	-------	-------	-------	-------	-------	-------	1.38	1.73	1.46	-------
1933---	1.26	0.97	0.97	0.98	0.94	0.85	1.33	1.07	0.81	2.74	2.12	1.31	15.35
1934---	1.14	1.95	1.05	1.44	1.62	1.53	1.60	1.45	2.28	2.33	1.65	2.09	20.13
1935---	-------	-------	-------	-------	1.77	1.95	1.71	1.39	.77	1.96	1.75	1.17	-------
1936---	2.21	-------	1.47	1.34	1.66	1.50	1.54	1.30	2.18	2.19	2.23	3.88	-------
1937---	1.46	2.19	1.43	1.22	1.33	.96	1.01	1.06	1.37	-------	-------	-------	-------
Mean--	1.52	1.70	1.23	1.24	1.46	1.36	1.44	1.25	1.48	2.12	1.90	1.98	18.68

TABLE 48

TEMPERATURE AT BERKELEY, ALAMEDA COUNTY, CALIFORNIA[1]

Year	Mean temperature in ° F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932---	-------	-------	-------	-------	-------	-------	-------	-------	-------	58	56	39	-------
1933---	39	43	48	50	50	55	59	58	58	60	56	45	52
1934---	47	49	55	54	56	59	60	60	62	58	52	48	55
1935---	44	48	45	52	54	59	59	59	57	55	49	47	52
1936---	48	46	51	52	57	59	61	61	63	60	54	44	55
1937---	34	43	48	48	54	58	60	60	60	-------	-------	-------	-------
Mean--	42	46	49	51	54	58	60	60	60	58	53	45	53

[1] Location of Station No. 2 in grove of maritime pine.

TABLE 49

WIND MOVEMENT AT BERKELEY, ALAMEDA COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932---	-------	-------	-------	-------	-------	-------	-------	-------	-------	850	741	901	-------
1933---	864	824	713	771	-------	628	582	498	651	616	1,060	820	8,027
1934---	851	719	890	1,214	1,178	1,239	1,025	953	965	1,008	943	1,259	12,244
1935---	1,263	1,078	1,316	1,172	1,254	948	1,022	836	720	1,125	1,087	996	12,817
1936---	1,203	1,051	1,147	1,016	1,221	959	852	854	939	958	1,097	1,059	12,356
1937---	1,319	1,052	942	1,059	1,057	922	858	836	869	-------	-------	-------	-------
Mean--	1,100	945	1,002	1,046	1,178	939	868	795	829	911	986	1,007	11,606

[1] Location of Station No. 2 in maritime pine.

TABLE 50

EVAPORATION AT BERNARDO BRIDGE, SAN DIEGO COUNTY, CALIFORNIA

Station:	
Location	On south shore of Lake Hodges, five miles south of Escondido where State Highway 395 crosses the lake. Lat. 33° 03′ N., Long. 117° 04′ W.
Elevation	330 feet.
Evaporation pan:	
Type	Ground pan.
Description	Square, 3 x 3 feet, depth 18 inches, set 14 inches in ground, painted black.
Authority for data	San Diego Water Department, Division of Water Development and Conservation.
Publication reference	None.
Meteorologic data	None.

Year	Evaporation in inches[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	1.84	2.69	3.96	4.77	6.79	7.56	7.99	7.83	5.68	4.23	2.65	1.36	57.35
1933	1.53	1.88	3.24	4.61	4.17	6.29	-------	6.36	5.45	4.10	2.65	1.85	-------
1934	2.22	1.92	3.28	4.87	7.07	5.67	8.73	8.21	6.59	2.80	1.56	1.81	54.73
1935	1.38	1.76	2.88	2.80	5.25	6.92	7.85	8.04	6.02	3.94	2.18	1.72	50.74
1936	1.39	1.69	3.25	3.83	5.60	7.23	8.54	7.48	6.43	3.12	2.84	-------	-------
1937	1.22	-------	2.67	3.14	6.91	6.84	6.67	7.01	5.28	2.64	1.57	1.94	-------
1938	.94	-------	2.94	4.17	4.71	5.40	6.64	6.58	5.95	3.04	2.93	2.22	-------
1939	1.59	1.77	1.41	3.55	5.20	7.79	7.52	6.54	3.73	3.04	1.71	1.43	45.28
1940	1.60	2.00	2.21	3.70	5.94	6.32	8.23	7.76	3.75	2.93	1.73	-------	-------
1941	1.76	1.50	2.35	2.66	4.51	5.66	6.44	5.43	3.54	2.49	2.06	1.30	39.70
1942	1.27	1.27	2.11	2.74	4.54	5.55	7.93	5.91	3.62	3.17	1.88	1.68	41.67
1943	2.32	2.06	2.06	2.30	4.25	6.29	6.77	5.39	4.47	3.35	3.31	1.79	44.36
1944	1.76	2.00	2.61	3.04	4.18	5.04	7.41	8.02	4.43	3.55	2.96	2.17	47.17
1945	1.37	1.79	2.45	2.87	5.33	5.78	7.55	6.67	5.52	4.26	3.38	2.63	49.60
Mean	1.58	1.86	2.67	3.50	5.32	6.31	7.56	6.94	5.03	3.33	2.39	1.82	48.31

[1] The low evaporation from this pan appears to be caused by shade from four or five eucalyptus trees 20 to 25 feet south of the pan. This record of 48.31 inches annually differs materially from the annual evaporation of 58.77 inches recorded from a concrete basin of the same proportions near Hodges dam.

TABLE 51

EVAPORATION ON BIG CREEK, FRESNO COUNTY, CALIFORNIA

Station:	
Location	On Big Creek, a tributary of Kings River, about five miles above Trimmer. Lat. 36° 58′ N., Long. 119° 15′ W.[1]
Elevation	1,075 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	California Forest and Range Experiment Station, Kings River Branch.
Publication reference	None.
Meteorologic data	Wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	-------	-------	-------	-------	-------	11.07	12.16	11.96	8.25	4.02	2.98	1.64	-------
1940	-------	-------	3.98	4.58	7.44	10.26	9.91	10.45	6.40	5.14	1.78	1.58	-------
1941	1.80	1.88	3.62	5.22	6.76	8.37	11.32	9.93	7.92	4.81	2.61	-------	-------
1942	1.72	2.47	3.19	2.39	-------	-------	-------	-------	-------	-------	-------	-------	-------
Mean	1.76	2.18	3.60	4.06	7.10	9.90	11.13	10.78	7.52	4.66	2.46	1.61	66.76

[1] Evaporation pan located in open woodland area.

TABLE 52

WIND MOVEMENT AT BIG CREEK, NEAR TRIMMER, FRESNO COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	1,285	1,572	1,739	1,380	1,831	2,226	2,203	2,240	2,196	1,612	1,375	1,265	20,924
1940	1,200	1,347	1,526	1,326	1,737	2,001	2,011	2,088	1,895	1,591	1,059	1,161	18,942
1941	1,304	1,202	1,458	1,295	1,533	1,763	1,989	1,997	1,941	1,543	1,192	1,062	18,279
1942	1,133	1,434	1,767	1,199	-------	-------	-------	-------	-------	-------	-------	-------	-------
Mean	1,230	1,389	1,622	1,300	1,700	1,997	2,068	2,108	2,011	1,582	1,209	1,163	19,379

[1] In open woodland area with anemometer cups about seven feet above ground.

TABLE 53

EVAPORATION AT BIG DALTON DAM, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	In Big Dalton Canyon in San Gabriel Mountains, about 4 miles northeast of Glendora. Lat. 34° 10′ N., Long. 117° 48′ W.[1]
Elevation	1,575 feet.
Evaporation pan:	
Type	Los Angeles County Flood Control District pan.
Description	Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data	Los Angeles County Flood Control District.
Publication reference	Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	-------	-------	-------	-------	10.44	9.61	14.45	9.14	10.22	9.17	5.84	-------
1931	4.66	3.86	8.86	7.74	8.02	9.80	12.76	11.97	11.16	7.32	5.08	3.02	94 25
1932	3.21	2.71	6.02	7.20	7.15	8.41	11.02	11.84	8.88	6.78	7.88	3.10	84.20
1933	4.25	4.35	6.47	5.51	6.60	9.39	10.92	10.22	7.78	8.03	7.99	3.22	84.73
1934	4.52	2.84	6.42	7.08	9.42	6.76	12.15	11.36	11.02	7.02	3.77	3.52	85.88
1935	2.87	4.16	3.25	4.42	5.72	8.30	10.45	10.42	7.82	6.50	4.12	3.28	71.31
1936	2.88	1.85	4.05	4.10	7.00	8.24	9.32	9.55	8.45	6.22	5.00	2.92	69.58
1937	1.50	1.92	3.28	5.75	5.00	6.60	9.40	9.40	8.25	6.98	3.80	3.22	65.10
1938	3.40	2.65	2.12	2.65	3.45	6.08	8.95	8.80	7.53	5.28	4.65	4.08	59.64
1939	2.98	3.48	2.48	3.55	4.28	6.32	7.70	7.88	6.98	4.85	3.75	2.82	57.07
1940	1.55	2.25	3.22	2.65	5.58	6.40	9.85	8.42	6.78	5.02	2.75	1.74	56.21
1941	1.45	-------	-------	2.55	5.18	5.22	8.50	6.32	5.65	4.00	3.35	1.55	-------
1942	1.72	2.30	3.25	2.22	4.80	4.80	9.48	8.18	6.55	4.72	4.48	3.83	56.33
1943	3.34	2.80	1.73	3.20	5.37	6.12	8.88	8.30	7.96	5.06	4.75	1.81	-------
1944	1.10	1.43	3.50	3.06	3.23	3.38	6.51	9.71	7.13	3.99	-------	1.14	-------
1945	3.10	2.02	-------	2.88	2.63	2.91	6.78	6.81	5.01	4.98	-------	-------	-------
Mean	2.84	2.76	4.20	4.30	5.56	6.82	9.52	9.60	7.88	6.06	5.04	3.01	67.59

[1] Evaporation pan located on the shoulder of a hill above the canyon bottom.

TABLE 54

EVAPORATION AT BIGGS RICE STATION, BUTTE COUNTY, CALIFORNIA

Station:	
Location	Four and one-half miles northwest of Biggs. Lat. 39° 28′ N., Long. 121° 49′ W.
Elevation	98 feet.
Evaporation pan:	
Type	U. S. Bureau of Plant Industry pan.
Description	Diameter 6 feet, depth 2 feet, set 20 inches in ground.
Authority for data	Biggs Rice Station, U. S. Bureau of Plant Industry, U. S. D. A.
Publication reference	Unpublished Annual Reports, Biggs Rice Station.
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Mar. to Oct. incl.
1913	------	------	------	------	------	------	11.22	9.25	8.77	6.22	------	------	------
1914	------	------	------	3.84	5.79	7.35	8.26	6.78	5.76	3.00	------	------	------
1915	------	------	------	3.38	5.00	8.50	9.62	7.82	5.91	4.47	------	------	------
1916	------	------	------	------	7.16	9.26	9.27	8.15	6.28	2.71	------	------	------
1917	------	------	------	4.09	6.12	9.45	10.11	8.18	6.16	------	------	------	------
1918	------	------	------	------	------	12.22	8.68	7.04	3.95	4.48	------	------	------
1919	------	------	------	------	------	8.99	9.69	7.86	5.50	5.25	------	------	------
1920	------	------	------	4.36	------	7.16	7.10	6.23	4.69	2.79	------	------	------
1921	------	------	------	5.24	5.85	7.05	9.08	7.85	4.96	2.88	------	------	------
1922	------	------	------	4.95	5.95	6.84	6.93	6.50	4.32	2.54	------	------	------
1923	------	------	------	4.23	6.71	7.23	8.86	7.28	5.67	3.87	------	------	------
1924	------	------	------	5.20	7.43	[1]7.15	8.41	6.44	------	------			
1925	------	------	------	------	5.26	7.22	8.08	7.31	4.68	3.27	------	------	------
1926	------	------	3.99	[2]3.73	[1]5.11	6.92	6.11	5.79	5.23	3.40	------	------	------
1927	------	------	2.42	3.92	5.97	[3]6.93	8.00	6.78	5.60	3.88	------	------	------
1928	------	------	------	3.62	6.75	8.10	6.70	5.69	4.34	3.31	------	------	------
1929	------	------	3.18	3.94	7.02	6.46	8.72	7.32	5.29	4.03	------	------	------
1930	------	------	[2]3.03	4.27	6.24	6.72	7.47	5.55	4.73	3.45	------	------	------
1931	------	------	3.55	5.40	7.03	7.33	8.54	7.48	5.92	3.30	------	------	------
1932	------	------	3.71	4.51	5.87	5.49	------	------	------	4.22	------	------	------
1933	------	------	3.04	5.46	5.71	8.43	9.01	7.91	5.42	4.08	------	------	------
1934	------	------	2.87	4.47	5.29	5.55	6.53	5.01	5.22	3.35	------	------	------
1935	------	------	2.55	2.94	5.67	7.98	8.89	7.64	5.15	3.80	------	------	------
1936	------	------	3.18	3.66	5.59	5.50	6.10	5.12	4.18	3.60	------	------	------
1937	------	------	2.08	4.27	7.03	7.44	8.79	7.70	5.51	3.26	------	------	------
1938	------	------	2.86	3.44	5.50	7.62	6.81	5.66	4.39	2.54	------	------	------
1939	------	------	2.70	5.29	6.74	8.29	9.04	7.79	5.41	3.70	------	------	------
1940	------	------	2.49	3.84	6.46	7.19	6.86	5.75	4.74	2.94	------	------	------
1941	------	------	2.80	3.67	5.65	7.08	8.35	7.48	6.41	4.17	------	------	------
1942	------	------	3.14	3.54	5.24	7.50	7.20	5.59	4.11	3.39	------	------	------
1943	------	------	2.14	3.71	7.27	6.76	8.10	7.96	5.44	3.51	------	------	------
1944	------	------	4.03	3.56	5.82	6.68	6.86	4.75	4.79	3.02	------	------	------
1945	------	------	2.36	5.24	5.53	8.69	8.65	7.43	6.61	3.71	------	------	------
Mean	------	------	2.95	4.21	6.10	7.54	8.19	6.91	5.33	3.62	------	------	44.85

[1] 4 days missing.
[2] 3 days missing.
[3] 1 day missing.

TABLE 55

TEMPERATURE AT BIGGS RICE STATION, BUTTE COUNTY, CALIFORNIA

Year	Mean temperature in °F.[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1915	45	50	57	60	61	74	78	89	70	71	52	58	64
1916	43	53	56	60	64	72	78	76	72	58	49	44	60
1917	42	44	49	54	62	72	83	78	70	68	52	45	60
1918	47	48	52	58	62	80	77	76	69	62	50	43	60
1919	45	48	51	60	68	74	78	77	71	60	51	46	61
1920	48	52	53	58	66	73	76	78	70	58	52	46	61
1921	46	50	55	57	62	75	80	76	70	64	53	47	61
1922	40	46	50	56	66	74	80	74	74	62	48	44	60
1923	43	48	55	55	64	65	75	76	73	62	54	42	59
1924	42	58	52	60	66	74	76	75	72	59	50	51	61
1925	45	51	54	58	66	75	80	74	68	62	49	44	60
1926	40	50	58	62	66	77	78	75	68	62	56	45	61
1927	46	50	52	58	65	74	78	74	68	62	54	44	60
1928	40	48	56	57	70	74	76	75	70	61	50	42	60
1929	40	46	52	54	66	72	76	76	70	68	52	48	60
1930	42	52	55	60	62	74	76	74	67	61	53	43	60
1931	45	50	54	61	71	72	82	77	68	60	49	43	61
1932	44	46	55	56	65	74	76	74	72	60	56	38	60
1933	40	45	54	58	62	72	82	78	68	67	53	44	60
1934	47	51	60	62	68	72	76	76	72	62	54	44	62
1935	44	48	49	56	64	76	76	78	72	60	48	44	60
1936	47	48	54	59	67	72	74	77	72	68	52	42	61
1937	36	45	53	56	68	74	80	77	72	62	54	48	60
1938	44	48	51	57	66	76	78	75	72	60	49	46	60
1939	44	44	53	64	68	74	78	77	72	62	53	48	61
1940	47	52	55	58	68	76	76	76	68	62	50	48	61
1941	48	51	56	56	66	71	79	74	67	60	52	47	60
1942	44	47	50	56	60	72	78	76	70	62	50	44	59
1943	45	50	54	58	67	68	77	73	72	60	53	46	60
1944	44	47	52	54	65	68	75	74	72	62	50	46	59
1945	42	49	46	58	64	74	80	74	72	64	50	-------	-------
Mean	44	49	53	58	65	73	78	76	70	62	52	45	60

[1] From unpublished Annual Reports, Biggs Rice Field Station.

TABLE 56

WIND MOVEMENT AT BIGGS RICE STATION, BUTTE COUNTY, CALIFORNIA

Year	Mean wind in miles per hour[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1926	2.14	3.77	3.12	3.32	3.54	2.63	2.02	1.82	3.07	2.59	3.25	3.53	2.90
1927	3.04	4.87	3.55	3.74	3.96	3.89	2.89	2.76	3.41	2.72	3.27	3.04	3.43
1928	2.00	2.45	2.68	2.85	3.68	4.21	2.89	1.51	1.68	1.94	2.22	2.20	2.52
1929	2.89	3.37	3.53	3.88	3.74	3.37	2.88	2.09	1.40	2.03	2.01	3.39	2.88
1930	3.24	3.35	3.29	3.31	4.39	2.90	2.11	1.91	1.89	1.80	2.23	1.72	2.68
1931	1.85	2.75	3.40	3.71	4.34	4.23	2.85	2.18	3.15	2.51	3.50	4.21	3.22
1932	3.87	3.17	4.11	4.00	4.27	2.85	2.37	2.01	0.85	2.71	2.50	2.62	2.94
1933	4.45	3.79	4.96	4.43	4.58	4.19	2.17	2.42	2.32	1.95	1.69	2.38	3.28
1934	2.58	2.94	1.56	1.82	2.73	3.38	2.49	1.40	1.95	1.96	2.57	2.88	2.36
1935	3.00	2.78	3.63	2.68	3.11	3.11	3.64	2.49	1.97	2.91	2.09	2.24	2.80
1936	4.12	4.06	3.30	2.42	2.89	3.01	2.22	1.17	1.28	1.48	1.03	2.22	2.43
1937	4.12	3.26	3.70	4.27	3.72	4.43	2.84	2.32	2.47	2.32	3.24	2.98	3.30
1938	2.83	6.04	5.35	3.05	2.83	3.56	2.64	1.95	1.61	1.98	2.41	2.11	3.03
1939	3.14	4.03	4.02	3.16	3.91	3.53	3.37	2.76	2.41	2.27	1.27	2.70	3.05
1940	3.45	5.19	3.74	3.46	3.38	3.04	2.48	1.54	2.49	1.56	2.21	4.04	3.05
1941	3.53	2.84	3.38	3.66	4.15	3.39	2.79	3.15	3.31	2.79	2.13	3.49	3.22
1942	2.49	3.64	3.19	3.87	3.52	2.80	2.12	1.86	2.02	1.84	2.70	2.75	2.73
1943	4.37	2.24	3.03	3.25	3.73	3.78	2.42	2.41	1.42	1.98	1.56	2.00	2.68
1944	2.69	4.33	4.03	4.13	3.93	4.81	3.17	1.88	1.69	1.54	2.52	1.41	3.01
1945	1.58	4.46	4.08	4.31	4.53	4.57	2.44	2.11	2.85	2.88	3.46	-------	-------
Mean	3.07	3.67	3.58	3.47	3.70	3.58	2.64	2.09	2.16	2.19	2.39	2.73	2.92

[1] From unpublished Annual Reports, Biggs Rice Field Station.

TABLE 57

EVAPORATION AT BIG LAKE (HENSHAW RESERVOIR), SAN DIEGO COUNTY, CALIFORNIA

Station:
Location ____________________On surface of "Big Lake" about four miles west of Warner Springs Post Office, within the area now covered by Henshaw Reservoir. Lat. 33° 15′ N., Long. 116° 43′ W.
Elevation __________________2,700 feet.
Evaporation pan:
Type _______________________Floating pan.
Description ________________Square, 3 x 3 feet, depth 18 inches.
Authority for data____________Volcan Land and Water Company.
Trans. Am. Soc. C. E., Vol. 80 (33).
Publication reference _________Unpublished report by George Cromwell, Eng'r., San Diego County Water Company (11).
Meteorologic data ____________Temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1913---	[1]2.00	3.30	4.31	5.71	6.03	5.76	6.51	5.53	6.18	6.29	3.67	2.79	58.08
1914---	1.69	3.50	4.60	4.98	5.23	6.61	8.17	9.10	7.75	5.04	3.62	1.65	61.94
1915---	1.96	2.51	3.16	4.44	6.17	9.68	10.46	8.28	8.90	6.14	4.39	2.42	68.51
1916---	1.19	3.48	5.64	7.00	9.38	9.91	11.52	10.45	9.30	7.12	2.44	-------	-------
Mean--	1.71	3.20	4.43	5.53	6.70	7.99	9.16	8.34	8.03	6.15	3.53	2.29	67.06

[1] Partly estimated for January, 1913.

TABLE 58

TEMPERATURE AT BIG LAKE (HENSHAW RESERVOIR), SAN DIEGO COUNTY, CALIFORNIA

Year	Mean temperature in °F. (33)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1913---	43	44	48	53	59	64	72	74	71	62	52	45	57
1914---	48	49	54	55	59	64	74	73	68	62	57	42	59
1915---	44	45	51	53	56	67	68	75	68	66	54	49	58
1916---	44	53	57	57	59	67	74	73	70	56	54	45	59
Mean--	45	48	52	54	58	66	72	74	69	62	54	45	58

TABLE 59

EVAPORATION AT BIG PINES PARK, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ____________In Big Pines Recreation Park, on north slope of San Gabriel Mountains. Lat. 34° 23′ N., Long. 117° 41′ W.[1]
Elevation ____________6,860 feet.
Evaporation pan:
Type ____________Ground pan.
Description ____________Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data____________Los Angeles County Flood Control District.
Publication reference ____________Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ____________None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	-------	-------	-------	6.24	2.58	-------	-------
1932	-------	-------	-------	5.26	6.30	8.68	11.42	12.16	9.00	6.56	5.30	-------	-------
1933	-------	-------	-------	4.47	5.84	10.22	9.79	7.77	9.06	6.00	4.08	-------	-------
1934	-------	-------	-------	-------	8.16	7.30	9.50	8.88	7.45	4.34	2.45	-------	-------
1935	-------	-------	-------	-------	6.12	9.24	9.80	8.59	6.95	6.38	3.26	-------	-------
1936	-------	-------	-------	-------	8.42	9.05	8.39	8.92	8.71	5.15	3.27	-------	-------
1937	-------	-------	-------	-------	7.05	9.26	10.12	10.40	8.44	6.22	4.12	-------	-------
1938	-------	-------	-------	-------	6.80	8.39	9.16	9.30	7.07	4.82	4.14	-------	-------
1939	-------	-------	-------	-------	6.79	9.64	10.31	9.36	5.19	[2]4.51	2.68	-------	-------
1940	-------	-------	-------	-------	6.66	9.80	10.90	9.93	7.88	5.20	-------	-------	-------
1941	-------	-------	-------	-------	-------	7.74	10.22	8.38	7.52	-------	-------	-------	-------
1942	-------	-------	-------	-------	5.88	7.96	9.92	8.63	7.56	-------	-------	-------	-------
1943	-------	-------	-------	-------	-------	8.80	10.14	9.97	7.90	3.32	-------	-------	-------
Mean	-------	-------	-------	-------	6.80	8.84	9.97	9.36	7.73	5.87	3.54	-------	52.11

[1] On desert side of San Gabriel Mountains.
[2] Partly estimated.

TABLE 60

EVAPORATION AT BIG TUJUNGA DAM, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location and Elevation ------------------ Until Oct. 1, 1939 one-third mile below Big Tujunga Dam in San Gabriel mountains at elevation 2,050 feet, then moved to a point 1,100 feet southwest of the dam at elevation 2,290 feet. Aug. 8, 1945 moved near right abutment of dam at elevation 2,315 feet. Lat. 34° 18′ N., Long. 118° 11′ W.
Evaporation pan:
Type ---------------------- Los Angeles County Flood Control District pan.
Description ---------------- Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data------------ Los Angeles County Flood Control District.
Publication reference --------- Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------ None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	------	------	5.42	[1]5.95	6.22	8.02	10.60	9.98	8.68	7.08	6.40	2.68	------
1933	2.12	3.90	5.38	4.94	5.85	8.48	10.85	9.32	7.88	6.78	5.22	1.80	72.52
1934	3.12	2.40	5.20	6.45	7.58	6.08	9.28	8.72	6.94	5.32	2.83	1.90	65.82
1935	1.58	2.35	2.45	2.95	4.50	6.95	8.00	7.50	7.00	5.68	2.98	2.58	54.52
1936	2.45	1.25	4.02	4.35	6.90	7.65	8.80	9.25	7.58	5.18	3.88	1.65	62.96
1937	.58	1.28	2.65	4.50	5.20	7.22	9.18	9.02	8.32	5.92	3.42	2.82	60.11
1938	2.52	1.52	2.08	3.66	5.44	7.15	9.18	9.22	8.03	5.96	5.56	2.88	63.20
1939	2.07	2.51	3.00	4.80	5.92	8.92	9.68	9.86	6.70	4.88	3.88	2.58	64.80
1940	1.70	1.92	3.33	4.01	6.12	8.82	10.78	10.15	7.58	6.06	3.86	1.91	66.33
1941	1.47	1.08	2.24	2.52	6.72	7.38	10.25	10.55	9.80	6.86	6.92	2.76	68.55
1942	4.20	4.30	6.69	4.08	8.02	9.42	15.08	13.82	12.12	8.48	6.68	5.06	97.95
1943	4.44	4.29	3.61	5.98	9.38	10.58	13.05	12.92	13.12	9.35	6.78	2.21	95.71
1944	3.61	2.13	5.32	5.42	6.28	6.94	10.98	12.29	8.88	7.05	3.30	3.92	76.12
1945	3.54	3.09	3.32	6.75	7.45	7.55	11.30	12.36	11.48	7.88	5.68	3.50	83.90
Mean	2.57	2.46	3.91	4.74	6.54	7.94	10.50	10.35	8.86	6.60	4.81	2.73	72.01

[1] Incomplete.

TABLE 61

EVAPORATION AT BOCA, NEVADA COUNTY, CALIFORNIA

Station:
Location ------------------ Seven miles northeast of Truckee and 300 feet south of Boca Dam. Lat. 39° 23′ N., Long. 120° 05′ W.[1]
Elevation ------------------ 5,590 feet.
Evaporation pan:
Type ---------------------- U. S. Weather Bureau pan.
Description ---------------- Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data------------ U. S. Weather Bureau.
Publication reference --------- U. S. Weather Bureau Climatological Data (41).
Meteorologic data ------------ Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	May through Sept.
1941	------	------	------	------	6.24	7.91	9.80	8.15	6.59	3.93	------	------	38.69
1942	------	------	------	------	6.09	8.86	10.96	9.52	7.11	4.36	------	------	42.54
1943	------	------	------	------	8.22	7.88	9.83	10.17	7.16	4.16	------	------	43.26
1944	------	------	------	------	7.47	7.09	9.83	8.92	7.20	------	------	------	41.41
1945	------	------	------	------	5.71	7.66	10.92	9.08	7.31	4.31	------	------	40.68
Mean	------	------	------	------	6.75	7.88	10.27	9.35	7.07	------	------	------	41.32

[1] Land around the station is approximately level for 800 feet to the north and 600 feet to the east, then rises toward forest covered mountains.

TABLE 62

TEMPERATURE AT BOCA, NEVADA COUNTY, CALIFORNIA

Year	Mean temperature in ° F. (41)[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1940	27	31	36	41	50	60	59	62	51	46	38	31	44
1941	30	32	35	36	49	54	65	60	50	43	39	29	44
1942	25	24	32	38	43	53	64	63	56	48	35	30	43
1943	28	29	35	42	47	49	61	58	-------	-------	-------	-------	-------
1944	24	25	28	36	48	50	58	56	54	46	32	30	41
1945	27	31	29	-------	46	53	62	58	53	49	34	-------	-------
Mean	27	29	32	39	47	53	62	60	53	46	36	30	43

[1] From Truckee records except 1944-45 which were observed at Boca.

TABLE 63

WIND MOVEMENT AT BOCA, NEVADA COUNTY, CALIFORNIA

Year	Total wind in miles (41)[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1941	1,203	1,144	1,749	2,158	2,223	1,752	1,352	1,279	1,282	1,566	1,103	1,145	17,956
1942	1,384	2,379	2,287	2,852	2,235	1,585	1,289	1,149	1,078	1,033	1,160	1,042	19,473
1943	1,217	684	1,256	2,084	1,998	1,753	1,260	1,495	1,003	1,313	666	762	15,491
1944	915	1,303	2,565	2,234	1,836	1,548	1,129	958	673	660	1,033	851	15,705
1945	1,147	2,275	2,308	2,675	1,785	1,388	1,230	1,143	1,319	1,113	1,267	1,246	18,896
Mean	1,173	1,557	2,033	2,401	2,015	1,605	1,252	1,205	1,071	1,137	1,046	1,009	17,514

[1] Anemometer cups set 5 inches above top of U. S. Weather Bureau pan.

TABLE 64

EVAPORATION AT BONSALL BASIN, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ---------- In San Luis Rey Valley, 17 miles above Oceanside. Lat. 33° 19′ N., Long. 117° 10′ W.[1]
  Elevation ---------- 215 feet.
Evaporation pan:
  Type ---------- U. S. Weather Bureau pan.
  Description ---------- Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data ---------- Div. of Irrig., SCS, U. S. Dept. of Agric.
Publication reference ---------- Utilization of the Waters of Lower San Luis Rey Valley, San Diego County, Calif. (32).
Meteorologic data ---------- Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	1.93	2.39	4.06	4.74	6.65	8.24	8.84	8.14	5.79	4.87	2.36	1.90	59.91
1940	1.63	2.61	4.28	5.61	7.53	7.52	9.55	8.58	6.70	5.22	2.43	1.76	63.42
1941	1.59	1.75	3.54	4.42	6.94	7.58	8.68	7.29	6.29	4.00	2.39	1.31	55.78
1942	1.74	2.49	4.50	4.40	7.32	7.91	9.18	8.02	6.31	4.82	2.50	1.78	60.97
1943	2.77	2.71	3.93	4.52	6.96	7.89	9.00	8.18	6.73	4.46	2.80	1.42	61.37
Mean	1.93	2.39	4.06	4.74	7.08	7.83	9.05	8.04	6.36	4.67	2.50	1.63	60.28

[1] This pan was located at bottom of gully with northern slope rising sharply from the station. Heavy growth of river-bottom brush nearby.

TABLE 65

TEMPERATURE AT BONSALL BASIN EVAPORATION STATION, SAN DIEGO COUNTY, CALIFORNIA

Year	Mean temperature in ° F. (32)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	------	------	------	------	66	67	71	72	73	65	60	58	------
1940	56	56	59	62	67	68	70	75	67	64	58	56	63
1941	53	56	58	55	64	65	70	70	65	62	56	51	60
1942	56	53	55	57	62	67	71	70	66	65	58	54	61
1943	54	56	57	60	64	64	70	71	69	64	58	54	62
Mean	55	55	57	58	65	66	70	72	68	64	58	55	62

TABLE 66

WIND MOVEMENT AT BONSALL BASIN EVAPORATION STATION, SAN DIEGO COUNTY, CALIFORNIA

Year	Total wind in miles (32)[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1940	------	------	------	866	1,212	1,054	1,186	1,145	898	1,031	475	518	------
1941	449	605	557	631	758	733	861	899	805	656	530	330	7,814
1942	523	1,467	765	767	1,033	1,026	1,035	953	937	654	466	535	10,161
1943	698	613	728	516	772	853	829	815	721	601	441	334	7,921
Mean	557	895	683	695	944	916	978	953	840	736	478	429	9,104

[1] Anemometer cups set 6 inches above top of Weather Bureau pan. Location was at bottom of gulley with slopes rising sharply from the station. Heavy growth of river-bottom brush nearby.

TABLE 67

EVAPORATION AT BOUQUET CANYON RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ------------------ About 15 miles west of Palmdale. Lat. 34° 35′ N., Long. 118° 22′ W.
  Elevation ------------------ 3,000 feet.
Evaporation pan:
  Type ------------------ Ground pan.
  Description ------------------ Square, 3 x 3 feet, depth 18 inches, set in ground 15 inches.
Authority for data ------------ Los Angeles Dept. of Water and Power.
Publication reference ---------- None.
Meteorologic data ------------ Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935	------	------	------	------	------	10.66	11.40	10.09	9.45	8.26	4.73	4.10	------
1936	3.90	1.74	5.58	6.05	9.04	10.03	11.53	11.64	10.08	6.90	7.63	3.73	87.85
1937	2.32	2.46	3.91	7.26	8.06	10.44	13.77	13.44	10.84	8.84	4.92	4.90	91.16
1938	5.37	2.78	3.95	6.34	7.50	9.81	13.10	12.36	10.43	7.30	7.52	4.52	90.98
1939	3.87	4.21	4.84	7.38	8.09	11.85	11.82	12.12	8.45	8.85	6.06	4.90	92.11
1940	2.68	3.25	5.52	5.92	8.98	10.88	12.80	11.84	8.90	7.52	6.71	3.95	88.95
1941	2.47	1.88	4.23	5.35	8.49	9.20	11.82	9.64	9.20	6.33	5.77	2.65	77.03
1942	4.30	4.06	6.34	3.96	7.75	10.70	13.20	11.53	9.86	7.69	5.94	4.15	89.48
1943	4.31	3.95	6.18	4.69	9.60	8.91	11.76	11.28	9.82	6.59	6.22	3.13	86.44
1944	3.53	2.69	5.97	5.54	7.18	7.12	11.12	12.18	9.33	7.06	3.85	4.82	80.39
Mean	3.64	3.00	5.17	5.83	8.30	9.33	12.23	11.61	9.64	7.53	5.94	4.08	86.90

TABLE 68

EVAPORATION AT BOUQUET CANYON RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ____________________At Bouquet Canyon Reservoir about 15 miles west of Palmdale. Lat. 34° 35′ N., Long. 118° 22′ W.
Elevation ____________________3,000 feet.
Evaporation pan:
Type ____________________Floating pan.
Description ____________________Square, 3 x 3 feet, depth 18 inches.
Authority for data____________________Los Angeles Dept. of Water and Power.
Publication reference ____________________None.
Meteorologic data ____________________Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935	-------	-------	-------	-------	-------	8.44	9.88	9.24	8.50	7.27	4.61	3.57	-------
1936	3.29	1.44	4.32	4.55	7.50	8.13	9.55	10.04	9.04	6.36	5.91	2.33	72.46
1937	1.76	2.00	2.87	5.43	5.46	7.04	10.07	10.14	8.74	7.39	4.54	3.42	68.86
1938	4.19	1.60	2.27	3.71	4.57	6.99	9.26	9.74	8.57	6.35	5.10	3.43	65.78
1939	2.59	3.05	3.48	5.01	6.42	9.14	10.24	10.70	7.54	7.67	5.17	4.07	75.08
1940	2.32	2.58	3.90	4.76	7.24	8.84	11.06	10.22	8.18	6.94	6.37	3.13	75.54
1941	1.71	1.06	2.87	3.37	5.70	7.60	9.95	8.30	8.23	5.95	5.11	3.91	63.76
1942	3.50	3.12	4.56	3.42	6.13	8.70	11.18	9.84	8.58	7.61	5.56	3.83	76.03
1943	3.74	3.33	5.14	4.05	7.44	7.69	9.50	10.06	9.12	6.69	6.14	3.13	76.03
1944	2.97	2.21	4.69	4.42	5.90	5.68	9.12	10.56	8.25	6.42	3.93	3.83	67.98
Mean	2.90	2.26	3.79	4.30	6.26	7.82	9.99	9.89	8.48	6.86	5.24	3.46	71.25

TABLE 69

TEMPERATURE AT BOUQUET CANYON RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Year	Mean temperature in ° F.[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	50	49	59	62	63	62	74	73	69	62	53	48	60
1935	44	49	46	52	56	68	73	76	73	69	51	49	59
1936	49	47	54	58	64	71	77	77	72	63	56	46	61
1937	34	45	49	53	61	68	76	77	73	66	57	51	59
1938	49	45	47	54	60	66	74	75	74	60	51	50	59
1939	45	42	50	59	60	68	74	77	69	62	57	53	60
1940	48	47	53	56	63	70	73	75	67	64	53	49	60
1941	46	48	50	51	61	62	74	70	66	57	55	46	57
1942	47	45	51	52	58	68	77	74	70	63	56	50	59
1943	47	49	51	56	62	63	73	73	74	63	55	45	59
1944	44	42	49	51	58	60	69	74	70	62	49	48	56
Mean	46	46	51	55	60	66	74	75	71	63	54	49	59

[1] Los Angeles Department of Water and Power records.

TABLE 70

WIND MOVEMENT AT BOUQUET CANYON RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1940	8,630	5,542	6,770	5,256	6,026	4,680	5,134	4,687	4,536	6,547	9,576	8,705	76,089
1941	7,812	4,576	6,473	5,256	6,250	4,968	4,762	4,613	5,256	6,845	8,424	7,961	73,196
1942	9,523	5,606	7,886	5,760	5,580	5,112	4,762	4,687	5,544	6,175	6,696	7,217	74,548
1943	8,779	6,406	5,134	4,608	5,803	5,112	5,134	5,059	4,680	5,803	9,000	10,193	75,711
1944	9,226	5,542	7,812	5,328	5,654	4,869	4,613	4,762	5,184	5,506	7,344	9,449	75,289
Mean	8,794	5,534	6,815	5,242	5,861	4,948	4,881	4,762	5,040	6,175	8,208	8,705	74,965

[1] Anemometer set about 7 feet above ground surface. Los Angeles Department of Water and Power record.

TABLE 71

EVAPORATION AT BUENA VISTA LAKE, KERN COUNTY, CALIFORNIA

Station:
Location ------------------On west side of Buena Vista Lake, about 25 miles southwest of Bakersfield. Lat. 35° 11′ N., Long. 119° 25′ W.
Elevation ------------------290 feet.
Evaporation pan:
Type and description---------(1) Land pan, square, 3 x 3 feet, 2 feet deep, setting unknown.
(2) Floating pan, square, 3 x 3 feet, 2 feet deep, maintained 100 to 600 feet off shore.[1]
Authority for data-------------State of Calif., Dept. of Engineering.
Publication reference ----------State of Calif., Bull. No. 9 (19).
Meteorologic data -------------None.

Year and month	Evaporation in inches				Indicated coefficient for floating pan
	Land pan	Floating pan[1]	Estimated corrected[1] floating pan	Actual lake evaporation	
1920					
January	1.82	1.82	1.82	----------	----------
February	2.45	3.17	2.50	----------	----------
March	2.83	5.34	2.89	----------	----------
April	5.99	6.78	6.78	----------	----------
May	9.05	10.58	10.58	----------	----------
June	10.00	11.72	11.72	----------	----------
July	10.14	12.61	12.61	7.32	0.58
August	9.62	11.27	11.27	6.96	.62
September	7.21	8.46	8.46	7.08	.84
October	4.88	5.42	5.42	4.56	.84
November	2.29	2.44	2.44	1.92	.79
December	1.56	1.50	1.50	----------	----------
Annual	67.84	81.11	77.99	----------	----------

[1] Both actual and corrected floating pan data are of doubtful value. On 10 occasions the floating pan filled by wave action, mostly in June and July. Pelicans used the pan and the raft as a fish trap and a bathing pool, mostly in February and March. The pan was then screened with ordinary chicken wire. Perhaps the principal reason why the floating pan shows a higher evaporation than the land pan is that water in the pan was maintained at a higher level than water in the lake. According to Bulletin No. 9 (19) "The water surface in the pan was maintained three inches from the top of the pan. Owing to the flat slopes of the bed of the lake and the shallowness of the water during a portion of the season the pan was set in an excavated hole so that the water on the outside did not get lower than six inches below the top of the pan at any time." Investigations elsewhere have shown an increased rate of evaporation whenever water in an evaporation pan is higher than either the surrounding ground or water surface.

TABLE 72

EVAPORATION AT BUENA VISTA LAKE, KERN COUNTY, CALIFORNIA

Station:	
Location	About twenty miles southwest of Bakersfield. Lat. 35° 12′ N., Long. 119° 18′ W.
Elevation	Approx. 290 feet.
Evaporation basin:	
Basin	Buena Vista Lake.[1]
Description	Area is fluctuating but usually covers several thousand acres comprising a large reservoir of shallow depth.
Authority for data	These data prepared from inflow, outflow records and reservoir fluctuations obtained by Buena Vista Water Storage District and average rainfall at the Three Weather Bureau stations at Bakersfield, Buttonwillow and Maricopa. Evaporation computations were made by Walter Ruppel, office of H. L. Haehl, Consultant Engineer, San Francisco, California.
Publication reference	None.
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1937	-------	1.1	2.5	5.6	7.9	6.2	10.0	12.0	7.2	6.5	-------	-------	-------
1938	0.7	2.5	1.8	1.1	6.0	6.2	7.7	10.0	6.8	4.6	2.5	3.0	52.9
1939	1.1	1.3	2.9	3.7	7.4	7.2	9.6	10.2	6.7	2.6	1.6	2.3	56.6
1940	1.3	5.5	.5	4.9	7.9	5.5	10.7	9.8	7.4	5.4	3.2	1.1	63.2
1941	1.3	-------	-------	1.2	3.8	5.4	5.8	7.1	7.6	4.3	2.9	1.6	-------
1942	1.8	1.9	4.3	4.4	3.4	6.1	8.2	11.0	8.8	4.1	2.0	1.8	57.8
1943	1.0	.7	2.0	4.1	9.2	7.7	8.2	9.2	10.0	4.6	3.1	1.8	61.6
1944	1.2	1.1	4.6	6.2	6.0	6.7	6.7	12.8	7.1	4.2	1.7	.6	58.9
1945	1.0	.1	4.4	7.2	2.8	4.8	9.6	10.0	8.5	5.5	3.2	1.4	58.5
Mean	1.2	1.8	2.9	4.3	6.0	6.2	8.5	10.2	7.8	4.6	2.5	1.7	57.7

[1] Uncertainty as to the quantity of water absorbed by the soil of overflowed areas during lake fluctuation would appear to account for some of the irregularities appearing in the monthly evaporation.

TABLE 73

EVAPORATION AT CALAVERAS RESERVOIR, SANTA CLARA COUNTY, CALIFORNIA

Station:	
Location	About 10 miles north of San Jose. Lat. 37° 26′ N., Long. 121° 50′ W.
Elevation	Approx. 750 feet.
Evaporation pan:	
Type	Floating pan.
Description	Size unknown.
Authority for data	Spring Valley Water Company.
Publication reference	None.
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1917	0.74	1.48	2.76	4.76	7.32	7.93	9.23	8.27	6.32	3.54	4.08	1.08	56.51
1918	1.24	1.79	2.27	4.02	5.41	8.48	10.00	8.20	5.46	4.56	1.86	1.32	54.61
1919	1.86	2.03	2.28	4.38	6.17	8.56	-------	-------	-------	-------	-------	-------	-------
Mean	1.28	1.77	2.44	4.39	6.30	8.32	9.62	8.24	5.89	4.05	2.47	1.20	55.97

TABLE 74

EVAPORATION AT CALEXICO, IMPERIAL COUNTY, CALIFORNIA

Station:
Location ------------------Lat. 32° 35′ N., Long. 115° 29′ W.
Elevation ----------------Sea level.
Evaporation pan:
Type ----------------------Ground pan.
Description ---------------Circular; diameter between 22 and 36 inches, depth 30 inches, set in ground 29 inches.
Authority for data------------Office of Exp. Sta., U. S. Dept. of Agric.
Publication reference ---------U. S. Dept. of Agric., Office of Exp. Sta. Bull. 177 (13).
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1903	-------	-------	-------	-------	-------	-------	14.48	12.72	10.29	7.50	4.80	4.52	-------
1904	4.39	6.32	8.86	9.55	10.91	13.89	12.47	10.98	8.61	8.78	5.40	3.48	103.64
1905	2.72	1.74	4.44	4.74	8.38	12.86	10.43	8.52	7.83	6.77	3.23	3.43	75.09
Mean	3.56	4.03	6.65	7.14	9.64	13.38	12.46	10.74	8.91	7.68	4.48	3.81	92.48

TABLE 75

EVAPORATION AT CAMP BALDY, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ------------------At U. S. Forest Service Guard Station in San Antonio Canyon. Lat. 34° 14′ N., Long. 117° 39′ W.*
Elevation ----------------4,300 feet.
Evaporation pan:
Type ----------------------Ground pan.
Description ---------------Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data------------Los Angeles County Flood Control District.
Publication reference ---------Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	-------	-------	-------	-------	-------	-------	-------	-------	-------	5.86	5.00	[1]1.18	-------
1933	[1]1.64	-------	4.04	4.38	4.36	7.40	9.09	7.95	6.66	5.36	5.32	-------	-------
1934	-------	-------	-------	-------	6.60	5.76	8.28	7.93	6.55	4.40	2.53	1.80	-------
1935	1.82	2.64	2.57	3.16	4.14	6.71	7.62	6.82	-------	-------	-------	-------	-------
Mean	1.73	2.64	3.30	3.77	5.03	6.29	8.33	7.57	6.60	5.21	4.28	1.48	56.23

* At bottom of steep-walled canyon covered with brush and trees.
[1] Incomplete.

TABLE 76

EVAPORATION AT CAMP SINGER (OPIDS CAMP), LOS ANGELES COUNTY, CALIFORNIA

Station :
Location ------------------ On north slope of San Gabriel Mountains and West Fork of San Gabriel River. Lat. 34° 15′ N., Long. 118° 06′ W.
Elevation ---------------- 4,350 feet.
Evaporation pan :
Type ---------------------- Ground pan.
Description --------------- Diameter 2 feet, depth 3 feet, set 2.75 feet in ground.
Authority for data ------------ Los Angeles County Flood Control District.
Publication reference --------- Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------ None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	May to Oct. incl.
1931	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	1.38	1.78	-------
1932	-------	-------	1.82	3.31	4.30	5.37	7.94	7.68	5.45	3.06	2.02	-------	33.80
1933	-------	-------	-------	-------	3.46	4.96	6.92	6.72	5.10	2.98	-------	-------	30.14
1934	2.05	2.70	-------	3.82	5.26	5.22	6.84	6.50	2.24	1.71	1.20	-------	27.77
1935	-------	-------	-------	1.82	2.62	4.48	5.58	5.32	4.20	5.56	2.19	-------	27.76
1936	-------	-------	-------	-------	5.48	6.05	8.05	7.31	6.20	3.89	2.29	-------	36.98
1937	-------	-------	1.32	2.95	6.04	8.34	10.66	11.21	7.91	4.94	1.90	-------	49.10
1938	-------	-------	-------	3.12	5.14	7.19	8.83	8.08	5.45	2.25	1.84	.94	36.94
1939	-------	-------	-------	4.28	5.74	7.68	8.00	8.04	3.84	2.29	1.13	-------	35.59
1940	-------	-------	-------	2.54	5.13	6.82	8.40	8.09	4.43	2.55	[1]1.09	------	35.42
1941	-------	-------	-------	1.96	5.42	5.86	7.40	5.96	3.99	3.21	-------	-------	31.84
1942	-------	-------	-------	-------	4.79	6.60	8.56	6.78	5.86	2.22	-------	-------	34.81
1943	-------	-------	-------	2.40	5.28	6.20	8.22	7.93	[2]6.02	3.08	1.68	-------	36.73
1944	-------	-------	-------	3.44	5.27	5.07	6.72	7.81	5.77	2.87	-------	------	33.51
1945	-------	-------	-------	4.18	5.34	6.34	9.10	7.65	6.20	2.61	-------	-------	37.24
Mean	-------	-------	-------	3.07	4.95	6.16	7.94	7.50	5.19	3.09	1.67	-------	34.83

[1] Incomplete.
[2] Partly estimated.

TABLE 77

EVAPORATION AT CHATSWORTH RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	West side of San Fernando Valley. Lat. 34° 14′ N., Long. 118° 37′ W.
Elevation	865 feet.
Evaporation pan:	
Type	Ground pan.
Description	Diameter 2 feet, depth 3 feet, set 2.75 feet in ground.
Authority for data	Los Angeles County Flood Control District.
Publication reference	Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data	Temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	-------	-------	-------	7.48	5.24	3.69	-------
1932	4.10	3.30	5.90	7.24	7.62	8.41	10.10	10.35	7.36	7.66	7.60	4.31	83.95
1933	4.69	5.42	6.60	5.70	8.06	8.30	10.02	9.52	7.92	6.69	8.12	2.50	82.54
1934	5.46	2.57	5.32	7.92	9.40	6.68	10.42	9.55	8.68	6.42	3.84	3.73	79.99
1935	3.18	4.32	2.84	3.67	4.90	7.02	10.20	9.85	8.42	7.68	4.86	4.58	71.52
1936	4.98	2.16	4.74	5.14	8.42	9.54	10.62	10.17	8.46	6.10	6.70	3.46	80.49
1937	2.82	2.44	4.28	6.12	5.46	6.98	10.08	9.75	8.88	6.42	3.78	5.26	72.27
1938	5.87	2.62	4.54	5.78	7.68	7.94	9.60	9.72	8.96	6.64	7.48	4.20	81.03
1939	3.46	3.83	3.18	5.04	7.32	8.90	10.22	9.94	8.38	7.47	3.64	3.42	74.80
1940	1.96	2.67	3.70	4.64	7.59	8.20	11.35	10.12	7.68	6.22	5.73	3.08	72.94
1941	1.76	1.62	2.90	3.46	7.25	6.92	8.92	7.53	6.75	5.34	4.38	2.48	59.31
1942	3.28	3.20	5.16	3.48	6.34	7.75	10.54	9.08	6.96	5.70	4.96	3.39	69.84
1943	3.72	4.04	2.54	3.92	6.70	7.78	9.15	9.05	7.52	5.54	5.55	2.72	68.23
1944	3.92	2.41	5.50	5.02	5.22	6.08	7.98	9.76	7.15	5.18	3.48	3.46	65.16
1945	3.05	2.84	3.08	5.72	6.68	6.18	9.25	9.82	7.56	4.86	4.36	2.34	65.74
Mean	3.73	3.10	4.30	5.20	7.04	7.62	9.89	9.59	7.83	6.36	5.31	3.51	73.48

TABLE 78

TEMPERATURE AT CHATSWORTH RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Year	Mean temperature in ° F.[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	59	58	61	61	63	68	73	73	72	66	65	51	64
1933	51	52	56	57	60	68	75	75	68	69	64	54	62
1934	58	57	65	65	69	66	76	75	74	67	60	56	66
1935	52	56	51	58	61	70	74	77	72	64	58	55	62
1936	56	52	57	60	65	71	77	77	72	66	64	54	64
1937	43	52	55	60	65	70	76	76	74	68	60	58	63
1938	57	52	54	59	64	68	74	76	73	66	59	58	63
1939	52	49	55	62	63	69	75	77	76	68	63	60	64
1940	54	54	58	61	67	70	74	74	70	67	60	57	64
1941	53	55	57	56	68	67	75	73	69	64	63	54	63
1942	55	52	56	58	64	69	78	75	71	67	62	56	64
1943	54	57	56	60	66	68	74	74	75	68	62	53	64
1944	53	51	58	57	63	65	71	75	73	66	57	57	62
1945	54	55	52	66	63	67	76	77	75	66	59	54	64
Mean	54	53	56	60	64	68	75	75	72	66	61	56	64

[1] Records obtained from Los Angeles Department of Water and Power.

TABLE 79

EVAPORATION AT CHICO, BUTTE COUNTY, CALIFORNIA

Station:
  Location ------------------At U. S. Plant Introduction Garden about 5 miles S. E. of Chico. Lat. 39° 40′ N., Long. 121° 44′ W.
  Elevation ------------------189 feet.
Evaporation pan:
  Type ------------------Ground pan.
  Description ------------------Circular; diameter between 22 and 36 inches, depth 30 inches, set in ground 29 inches.
Authority for data------------U. S. Dept. of Agric. Office of Exp. Sta.
Publication reference ---------U. S. Dept. of Agric., Office of Exp. Sta., Bulletin 177 (13).
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1904---	0.50	1.06	1.10	2.97	5.60	6.78	8.34	7.66	4.79	2.18	1.55	0.95	43.48
1905---	.09	1.21	3.77	4.79	6.82	9.07	10.00	9.57	7.53	5.73	3.37	1.52	63.47
Mean--	.30	1.14	2.44	3.88	6.21	7.92	9.17	8.61	6.16	3.95	2.46	1.24	53.48

TABLE 80

EVAPORATION AT CHULA VISTA, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ------------------ Nine miles southeast of San Diego. Lat. 32° 36′ N., Long. 117° 06′ W.[1]
  Elevation ------------------ 9 feet.
Evaporation pan:
  Type ------------------ U. S. Weather Bureau pan.
  Description ------------------ Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data ------------ U. S. Weather Bureau.
Publication reference ---------- U. S. Weather Bureau Climatological Data (41).
Meteorologic data ------------ Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1918	-------	-------	-------	-------	-------	-------	-------	-------	6.07	4.85	3.80	2.80	-------
1919	4.14	3.36	4.78	5.47	6.13	7.88	7.62	6.86	5.92	5.23	4.00	2.98	64.37
1920	2.64	2.92	4.92	6.18	6.35	7.38	7.36	7.41	6.16	4.97	3.53	3.05	62.87
1921	2.69	3.17	5.03	6.66	5.52	6.12	7.26	6.59	6.17	4.30	3.48	2.99	59.98
1922	2.88	3.29	4.77	5.37	6.22	6.40	6.87	6.94	5.93	4.97	3.47	2.18	59.29
1923	2.59	2.96	5.14	5.03	7.27	6.94	6.89	6.84	5.29	4.82	4.10	3.74	61.61
1924	3.02	3.87	4.82	5.42	6.37	6.88	7.48	6.71	5.60	4.46	3.72	2.48	60.83
1925	2.72	2.73	4.64	4.81	5.95	6.53	7.90	7.19	5.66	3.68	4.24	3.03	59.08
1926	3.29	3.61	5.45	5.10	6.69	6.44	7.26	7.18	5.75	4.86	4.06	2.30	61.99
1927	2.10	2.37	4.14	4.88	6.12	5.92	7.14	6.80	5.78	4.17	2.97	2.51	54.90
1928	2.81	3.33	4.75	6.01	5.67	6.33	7.43	6.69	5.43	4.49	3.80	3.00	59.74
1929	2.68	3.30	4.76	6.06	7.49	7.16	7.91	7.22	5.48	5.10	4.04	2.94	64.14
1930	2.98	3.52	4.97	6.10	6.75	6.64	7.82	7.48	6.45	5.42	4.58	3.25	65.96
1931	2.93	3.64	5.76	6.01	7.35	8.28	8.23	7.34	6.67	5.38	3.48	2.73	67.80
1932	2.86	3.04	5.06	6.45	7.03	7.19	7.17	6.97	5.28	4.40	4.06	2.76	62.27
1933	2.72	3.57	5.16	5.91	6.31	6.65	7.00	7.02	5.14	4.13	3.87	2.35	59.83
1934	3.06	3.24	5.12	6.33	7.86	7.09	7.81	7.77	6.79	4.75	3.50	2.96	66.28
1935	2.58	3.35	4.51	5.61	7.32	6.94	7.45	6.98	6.00	5.17	3.22	2.67	61.80
1936	2.78	2.89	4.95	5.68	7.59	7.57	7.79	7.68	6.30	4.58	3.93	2.99	64.73
1937	2.88	2.88	4.94	5.60	5.98	7.17	7.22	7.18	6.24	4.55	2.79	2.78	60.21
1938	3.17	3.27	5.00	6.07	6.42	7.02	7.38	6.90	6.32	4.72	4.33	3.02	63.62
1939	3.02	3.75	4.15	5.50	6.96	7.42	7.98	7.04	6.02	5.41	3.13	2.50	62.88
1940	2.40	3.37	5.04	6.54	7.08	6.76	7.92	7.19	5.92	5.17	4.14	2.92	64.45
1941	2.42	3.12	4.73	5.22	7.14	7.11	7.14	6.92	6.09	4.71	3.15	2.44	60.19
1942	2.62	3.19	5.15	5.22	7.31	6.66	7.70	7.10	6.05	4.93	3.09	2.43	61.45
1943	3.04	3.38	4.61	5.25	7.02	7.07	7.89	7.52	6.21	4.68	3.92	2.71	63.30
1944	2.72	3.32	5.34	6.26	6.50	7.14	7.64	7.18	5.47	4.40	3.13	2.86	61.96
1945	2.26	3.24	4.47	5.71	7.20	6.70	7.17	6.78	6.36	4.88	3.62	2.68	61.07
Mean	2.81	3.25	4.89	5.72	6.72	6.94	7.50	7.09	5.95	4.76	3.68	2.79	62.10

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[1] Located at the Western Salt Works. The Pacific Ocean lies to the west, low level land extends three miles south, gently rolling land six miles east and low level land 10 miles north. Area is populated.

TABLE 81

TEMPERATURE AT CHULA VISTA, SAN DIEGO COUNTY, CALIFORNIA

Year	Mean temperature in ° F. (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1920	52	55	54	49	59	62	65	68	64	59	56	52	58
1921	51	53	56	55	57	62	68	67	65	63	59	58	60
1922	51	53	53	54	59	63	67	69	68	62	54	56	59
1923	53	52	55	57	61	61	65	67	66	61	61	55	60
1924	51	56	55	57	61	64	66	66	64	58	57	52	59
1925	51	53	55	57	61	63	69	67	64	62	58	57	60
1926	53	57	60	63	63	66	67	68	64	62	61	53	61
1927	52	55	55	57	60	62	67	67	64	62	60	53	60
1928	54	54	57	56	62	63	65	66	64	60	57	53	59
1929	51	50	53	56	60	64	68	70	67	64	57	56	60
1930	54	55	58	60	59	64	68	69	65	62	60	53	60
1931	54	60	58	61	65	67	72	72	68	64	55	51	62
1932	50	53	55	58	60	62	65	65	64	61	60	51	59
1933	50	50	54	56	56	61	65	66	62	61	58	52	58
1934	52	56	59	60	63	63	68	68	68	63	59	57	61
1935	54	55	52	58	60	62	66	70	66	61	54	54	59
1936	53	54	55	56	61	64	69	70	66	63	59	55	60
1937	47	51	55	57	61	63	67	68	67	62	57	57	59
1938	55	55	55	58	60	62	66	68	68	61	55	56	60
1939	52	48	53	59	61	63	67	68	72	64	60	57	60
1940	56	56	57	60	63	64	66	67	66	64	58	59	61
1941	54	57	59	58	64	63	66	68	64	63	59	54	61
1942	54	51	54	58	60	62	67	67	64	63	56	53	59
1943	53	56	57	58	62	62	66	69	66	63	58	56	60
1944	53	52	54	56	61	62	65	66	65	62	58	55	59
1945	52	54	53	56	60	63	67	69	68	64	57	54	60
Mean	52	54	55	57	61	63	67	68	66	62	58	54	60

TABLE 82

WIND MOVEMENT AT CHULA VISTA, SAN DIEGO COUNTY, CALIFORNIA

Year	Total wind in miles (41)[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1918	-------	-------	-------	-------	-------	-------	-------	-------	2,913	2,682	2,723	2,544	-------
1919	2,435	3,082	3,307	3,280	3,781	3,445	3,336	3,208	2,988	2,643	2,657	2,108	36,270
1920	2,175	2,293	3,683	3,781	3,805	3,516	3,484	3,368	3,011	2,970	2,245	2,585	36,916
1921	2,392	2,530	3,223	3,863	3,608	3,191	3,175	3,172	2,866	2,467	2,084	2,360	34,931
1922	2,915	2,510	3,128	3,553	3,460	2,982	2,983	2,808	2,577	2,491	2,147	2,040	33,594
1923	2,097	2,164	2,782	3,353	3,683	3,558	3,340	3,106	3,000	2,575	2,090	2,871	34,619
1924	2,081	2,007	3,762	3,153	3,196	3,174	3,674	3,159	2,702	2,479	1,980	2,353	33,720
1925	1,993	2,144	2,759	3,037	3,302	3,317	3,113	3,147	2,676	2,100	2,380	1,878	31,846
1926	2,252	2,213	2,658	2,899	3,033	2,442	2,621	2,835	2,496	2,196	1,820	2,163	29,628
1927	1,609	2,123	2,480	2,550	3,231	3,037	3,058	2,794	2,739	2,196	1,746	2,026	29,589
1928	1,740	2,216	2,767	2.930	3,006	3,029	2,847	2,811	2,350	2,335	2,038	1,843	29,912
1929	2,162	2,434	3,122	3,424	3,144	3,101	3,109	2,811	2,415	2,122	1,531	1,813	31,188
1930	2,607	2,200	2,874	3,062	3,654	3,095	2,820	2,580	2,593	2,119	2,216	1,602	31,422
1931	1,655	2,011	2,277	2,463	2,589	2,644	2,486	2,826	2,464	2,151	2,060	1,937	27,563
1932	1,859	2,299	2,170	2,686	2,742	2,850	2,753	2,893	2,219	1,885	1,222	1,834	27,412
1933	2,034	1,591	2,000	2,618	2,971	2,465	2,670	2,812	2,507	1,952	1,459	1,429	26,508
1934	1,483	1,836	2,074	2,604	3,014	3,307	3,084	3,229	2,409	2,246	1,639	1,713	28,638
1935	1,932	1,684	2,442	2,693	2,877	2,475	2,730	2,722	2,506	1,927	1,636	1,435	27,059
1936	1,492	2,440	2,768	2,739	2,966	3,179	2,840	2,562	2,281	2,093	1,331	2,085	28,776
1937	1,995	1,897	2,592	2,216	2,273	2,325	2,650	2,464	2,338	1,612	1,208	1,194	24,764
1938	1,573	1,933	3,054	2,572	2,511	2,755	2,704	2,549	1,989	1,834	1,557	1,496	26,527
1939	1,794	2,006	2,308	2,290	2,827	2,710	2,803	2,556	2,165	1,738	1,186	1,188	25,571
1940	1,757	1,888	2,290	2,604	2,738	3,066	2,938	2,694	2,388	1,966	1,684	1,887	27,900
1941	1,438	1,751	2,022	2,281	2,162	2,211	2,682	2,381	2,317	1,889	1,457	1,842	24,433
1942	1,352	1,882	2,460	2,424	2,747	2,218	2,364	2,245	2,458	2,102	1,620	1,554	25,426
1943	2,157	1,993	2,514	2,623	2,414	2,572	3,038	2,232	2,383	2,120	1,399	1,784	27,229
1944	1,781	2,323	2,383	3,155	2,852	3,060	2,995	2,521	2,364	2,259	2,050	1,456	29,199
1945	1,494	2,019	3,110	2,665	2,924	2,749	2,899	2,757	2,383	2,014	1,786	1,935	28,735
Mean	1,935	2,128	2,704	2,871	3,018	2,906	2,933	2,786	2,503	2,166	1,786	1,867	29,603

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[1] Anemometer cups set six inches higher than top of Weather Bureau pan.

TABLE 83

EVAPORATION AT CITRUS EXPERIMENT STATION, UNIVERSITY OF CALIFORNIA, RIVERSIDE COUNTY, CALIFORNIA

Station:
  Location ____________________Three miles east of Riverside. Lat. 33° 58′ N., Long. 117° 20′ W.[1]
  Elevation ___________________1,040 feet.
Evaporation pan:
  Type ________________________U. S. Weather Bureau pan.
  Description _________________Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data_____________Riverside Citrus Station.[2]
Publication reference __________Calif. Dept. of Pub. Wks. Bull. No. 44 (6).
Meteorologic data _____________None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1925	3.56	2.63	4.99	5.28	6.52	8.40	10.59	9.52	7.15	3.47	5.04	2.94	70.09
1926	4.42	3.81	4.85	4.57	7.86	7.44	9.04	9.32	7.00	5.90	2.56	1.89	68.66
1927	1.20	.94	4.13	4.00	7.61	7.60	9.98	10.30	7.23	5.62	3.77	1.98	64.36
1928	2.54	4.50	3.90	6.73	5.76	7.59	9.52	9.44	7.74	4.70	3.22	2.83	68.47
1929	2.41	2.38	4.12	4.59	6.90	8.61	10.09	9.97	5.40	5.53	5.49	3.60	69.09
1930	1.76	2.20	3.89	5.44	5.84	7.68	9.50	8.52	6.17	4.98	4.16	2.94	63.08
1931	2.85	4.89	5.69	5.85	6.99	7.53	9.78	9.32	6.09	4.28	2.67	1.82	67.76
1932	-------	-------	5.22	5.88	6.12	6.10	8.94	8.68	5.77	3.95	3.98	2.12	-------
1933	2.37	3.57	4.82	3.81	6.30	7.51	8.93	7.97	5.57	4.54	5.08	1.78	62.25
1934	3.91	2.52	4.73	7.40	8.46	6.70	9.14	8.55	6.66	4.33	2.65	2.15	67.20
1935	2.00	2.53	3.36	4.63	6.45	8.01	8.87	7.98	6.40	4.74	2.94	2.40	60.31
1936	2.37	2.54	4.16	5.39	7.39	8.17	8.26	8.16	6.54	4.42	3.34	1.61	62.35
1937	1.37	2.06	3.92	5.97	5.70	7.67	7.66	8.22	6.99	5.00	2.33	2.62	59.51
1938	3.00	2.43	3.64	5.48	6.93	7.18	8.63	8.24	6.91	4.51	3.90	2.55	63.40
1939	2.34	3.18	3.72	5.65	6.82	8.33	8.96	8.43	5.76	5.86	2.78	2.73	64.56
1940	2.67	3.96	4.71	6.53	7.78	7.46	9.49	8.52	6.96	6.01	4.26	2.06	70.41
1941	1.54	1.72	3.79	6.15	6.51	7.12	9.29	6.46	5.30	5.28	2.97	3.21	59.34
1942	2.51	3.02	5.08	4.48	7.58	7.21	9.89	8.46	6.05	4.44	3.20	2.34	64.26
1943	2.90	2.99	3.24	4.60	7.36	7.80	8.53	8.34	6.89	4.36	3.72	1.99	62.72
1944	2.21	2.46	5.27	5.18	6.22	6.63	7.98	8.90	6.04	4.17	2.50	2.18	59.74
1945	2.18	2.65	3.70	5.66	6.74	6.50	8.57	7.73	6.63	4.20	3.20	1.86	59.62
1946	3.59	2.79	4.14	5.39	5.30	-------	-------	-------	-------	-------	-------	-------	-------
Mean	2.56	2.85	4.32	5.39	6.78	7.49	9.12	8.62	6.44	4.78	3.51	2.36	64.22

[1] The evaporation pan is in the immediate vicinity of an orange grove which is about 50 feet west of the pan and various buildings north and east from 100 to 500 feet in distance.

[2] Records furnished by Director of the Citrus Experiment Station.

TABLE 84

EVAPORATON AT CLARKSBURG, YOLO COUNTY, CALIFORNIA

Station:	
Location	In Reclamation District 999, on Sacramento River 15 miles south of Sacramento. Lat. 38° 25′ N., Long. 121° 30′ W.
Elevation	20 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	Div. of Irrig. SCS., U. S. Dept. of Agric.
Publication reference	Calif. Dept. of Pub. Wks. Bull. No. 28 (29).
Meteorologic data	None.

Month	Evaporation in inches			
	1926	1927	1928	Mean
January				
February				
March				
April				
May		9.4		9.4
June	12.7	9.1		10.9
July	12.0	10.3	10.7	11.0
August	8.2	9.1	9.1	8.8
September	7.2		7.7	7.4
October			5.3	5.3
November				
December				

TABLE 85

EVAPORATION AT CLEAR LAKE, LAKE COUNTY, CALIFORNIA

Station:	
Location	At Lakeport on Clear Lake. Lat. 39° 01′ N., Long. 122° 56′ W.
Elevation	1,320 feet.
Evaporation pan:	
Type	Ground pan.
Description	Square, 3 x 3 feet, 18 inches deep, set with top of pan flush with ground surface.
Authority for data	U. S. Geological Survey.
Publication reference	Water Supply Papers 81, 134 and 177 (27) (8) (9).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1901										2.45	1.05	0.95	
1902	0.85	0.30	1.55	2.35	3.70	5.15	7.40	4.95	4.40	1.85	.45	.45	33.40
1903	.60	.75	.65	2.36	5.74	7.56	8.37	7.77	5.09	2.45	1.05	.79	43.18
1904	.85	.35	.50	2.10	5.05	7.40	8.60	7.85	5.05	2.30	1.35	.75	42.15
1905	.60	1.10	1.15	2.85	3.70	7.00	8.90	8.45	6.65	3.55	1.55	1.05	46.55
Mean	.72	.62	.96	2.41	4.55	6.78	8.32	7.25	5.30	2.52	1.09	.80	41.32

TABLE 86

EVAPORATION AT CLEAR LAKE, LAKE COUNTY, CALIFORNIA

Station:	
Location	At Lakeport, on Clear Lake. Lat. 39° 01′ N., Long. 122° 56′ W.
Elevation	1,320 feet.
Evaporation pan:	
Type	Floating pan.
Description	Square, 3 x 3 feet, depth 18 inches.
Authority for data	U. S. Geological Survey.
Publication reference	Water Supply Papers 81, 134 and 177 (27) (8) (9).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1901	0.85	0.95	2.40	3.05	3.70	3.95	5.15	5.00	3.35	2.30	0.85	1.30	32.85
1902	.85	.25	1.60	2.60	4.00	4.65	6.65	4.40	4.10	1.95	.45	.40	31.90
1903	.50	.80	.65	2.18	5.12	5.25	6.33	7.00	5.12	2.65	1.07	.92	37.59
1904	.95	.35	.50	1.95	4.60	7.00	7.45	7.15	4.85	2.05	1.25	.79	38.89
1905	.60	.90	1.05	2.45	3.45	6.50	7.70	7.25	5.95	3.10	1.30	.95	41.20
Mean	.75	0.65	1.24	2.45	4.17	5.47	6.66	6.16	4.67	2.41	.98	.87	36.48

TABLE 87

EVAPORATION AT LOCATIONS ALONG COYOTE CREEK, SANTA CLARA COUNTY, CALIFORNIA *

Month	San Felipe				Coyote Creek						Weber	
	Dam site		Reservoir site		Upper Gorge		Upper Gorge		Lower Gorge		Dam site	
	Ground pan, square 3 x 3 feet, depth 12 ins. Elev. 640 ft. Lat. 37° 12′ N. Long. 121° 40′ W.		Ground pan, square 3 x 3 feet, depth 12 ins. Elev. 650 ft. Lat. 37° 12′ N. Long. 121° 40′ W.		Floating pan, square 3 x 3 feet, depth 12 ins. Elev. 410 ft. Lat. 37° 10′ N. Long. 120° 37′ W.		Ground pan, square 3 x 3 feet, depth 12 ins. Elev. 425 ft. Lat. 37° 10′ N. Long. 120° 37′ W.		Ground pan, square 3 x 3 feet, depth 12 ins. Elev. 246 ft. Lat. 37° 13′ N. Long. 121° 44′ W.		Ground pan, square 3 x 3 feet, depth 12 ins. Elev. 300 ft. Lat. Long.	
	1904	1905	1904	1905	1904	1905	1904	1905	1904	1905	1904	1905
	Evaporation in inches											
January	[1]1.39	[1]3.16	[1]1.70	[1]1.00	[1]1.00	[2]0.90	[1]1.70	[2]3.20	1.26	0.80	[1]1.40	1.35
February	.85	[1]1.50	.62	[1] .70	[1] .80	[2] .70	[1]1.00	[1]2.40	1.07	1.10	[1]1.00	2.14
March	[1]2.38	[1]3.83	[1]1.60	[1]4.30	[2]1.70	[2]1.50	[2]2.60	[1]3.10	[1]2.40	2.52	[1]2.00	2.79
April	3.00	[1]3.60	2.31	[1]2.60	[1]2.10	[2]1.90	[1]3.10	[2]3.60	2.78	2.85	3.28	2.59
May	4.43	3.93	5.65	2.90	[1]3.20	[1]4.10	4.77	[1]4.20	6.84	3.45	5.83	[1]3.60
June	6.20	7.55	7.12	5.52	4.45	[1]3.50	7.60	6.92	7.41	6.95	7.13	6.42
July	7.45	8.47	9.28	7.95	4.80	[1]5.40	7.90	9.37	8.77	[1]9.50	8.11	8.37
August	6.56	7.99	8.55	8.08	4.30	5.40	7.14	7.93	6.42	7.11	8.02	7.09
September	5.05	4.90	5.44	5.83	[1]7.40	[1]3.10	4.46	5.48	4.41	[1]5.10	5.15	[1]5.80
October	2.11	[2]4.50	2.70	[1]3.80	1.70	2.00	2.78	5.32	4.51	3.81	4.01	3.97
November	[1]1.00	[2]2.10	1.28	[1]1.80	[1]1.80	1.29	1.35	1.68	3.11	1.77	[1]2.30	1.87
December	1.27	[2] .80	.93	[1] .70	[1]1.00	.59	[1]2.10	[1]2.20	.70	.80	[1]1.60	.73
Annual	41.69	52.33	47.18	45.18	34.25	30.38	46.50	55.40	49.68	45.76	49.83	46.72

* Authority: H. L. Haehl, Consulting Engineer, San Francisco, California. Ground pans were set eight inches in the ground.

[1] Partly estimated.

[2] Incomplete.

TABLE 88

EVAPORATION AT LOCATIONS ALONG COYOTE CREEK, SANTA CLARA COUNTY, CALIFORNIA *

Month	Laguna Seca									
	West side		West side		East side		South side		North side	
	Floating pan, square, 3 x 3 ft. depth 12 ins. Elev. 250 ft. Lat. 37° 13′ N. Long. 121° 45′W.		Ground pan, square, 3 x 3 ft. depth 12 ins. Elev. 260 ft. Lat. 37° 13′ N. Long. 121° 45′W.		Floating pan, square, 3 x 3 ft. depth 12 ins. Elev. 250 ft. Lat. 37° 13′ N. Long. 121° 44′W.		Ground pan, square, 3 x 3 ft. depth 12 ins. Elev. 275 ft. Lat. 37° 12′ N. Long. 121° 44′W.		Ground pan, square, 3 x 3 ft. depth 12 ins. Elev. 290 ft. Lat. 37° 13′ N. Long. 121° 45′W.	
	1904	1905	1904	1905	1904	1905	1904	1905	1904	1905
	Evaporation in inches									
January	[1]1.00	[1]1.60	[1]1.20	1.62	[2]1.10	[1]0.60	1.46	[1]1.40	[1]2.00	1.80
February	[1]0.40	[1]1.40	[1]1.60	1.23	[1]0.90	1.70	0.65	1.42	[1]1.80	1.82
March	[1]1.50	[2]2.70	[1]2.50	2.24	[2]1.80	2.50	2.37	2.82	2.23	2.79
April	[1]2.60	[1]3.50	2.36	2.94	[1]3.50	[1]4.20	3.36	3.49	3.80	3.55
May	4.12	[1]3.20	[1]6.40	4.46	5.05	4.03	7.27	5.37	8.80	5.40
June	6.40	3.49	[1]8.00	7.39	6.29	6.68	8.07	7.90	10.06	8.41
July	6.60	[1]5.50	8.39	10.04	6.91	[1]9.40	9.23	10.10	10.10	10.80
August	5.71	[1]6.00	7.80	8.41	5.94	10.42	8.31	8.50	8.81	9.04
September	[1]5.40	[1]8.40	[1]6.30	7.33	[1]5.50	[1]6.20	6.11	6.49	7.04	7.99
October	[1]2.70	[1]4.00	[1]5.70	5.57	[1]3.20	[2]4.30	3.63	4.64	4.25	4.85
November	[1]1.80	[1]2.40	1.78	2.65	1.89	[2]2.20	1.99	2.18	2.28	2.44
December	[1]1.20	[1]0.90	[1]1.80	0.93	[1]0.90	[2]1.30	[1]1.30	1.11	1.03	1.48
Annual	39.43	43.09	54.83	54.81	42.98	53.53	53.75	55.42	62.20	60.37

* Authority: H. L. Haehl, Consulting Engineer, San Francisco, California. Ground pans were set eight inches in the ground.

[1] Partly estimated.

[2] Estimated.

TABLE 89

EVAPORATION AT CROOKED CREEK, MONO COUNTY, CALIFORNIA

Station:
Location ____________________In Owens River near its confluence with Crooked Creek. Lat. 37° 35′ N., Long. 118° 42′ W.[1]
Elevation ____________________6,687 feet.
Evaporation pan:
Type ____________________Floating pan.
Description ____________________Square, 3 x 3 feet, depth 18 inches.
Authority for data____________________Los Angeles Dept. of Water and Power.
Publication reference ____________________None.
Meteorologic data ____________________Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Apr. to Nov.
1920	-------	-------	-------	-------	4.93	6.47	6.37	6.77	5.39	2.71	-------	-------	-------
1921	-------	-------	3.45	3.96	5.92	5.19	7.01	6.69	4.55	3.19	1.28	-------	-------
1922	-------	-------	-------	2.91	5.63	6.03	6.15	5.34	4.10	2.29	-------	-------	-------
1923	-------	-------	2.67	3.66	5.53	5.65	7.66	6.74	4.12	3.17	1.56	-------	-------
1924	-------	-------	-------	2.79	4.11	5.53	5.75	4.91	5.08	3.75	2.54	-------	-------
1925	-------	-------	2.87	2.79	4.08	4.06	4.49	-------	-------	2.94	-------	-------	-------
1926	-------	-------	-------	-------	-------	5.00	5.01	5.23	4.55	2.67	1.65	-------	-------
1927	-------	-------	-------	-------	-------	4.92	3.30	4.23	3.91	-------	-------	-------	-------
1928	-------	-------	---- --	-------	3.46	-------	5.28	5.50	3.84	3.30	-------	-------	-------
1929	-------	-------	-------	-------	4.84	-------	3.76	5.27	3.54	2.62	-------	-------	-------
1930	-------	-------	-------	4.11	4.06	5.74	5.37	5.48	4.78	-------	-------	-------	-------
1931	-------	-------	-------	3.95	4.48	4.96	-------	-------	5.21	3.89	1.53	-------	-------
1932	-------	-------	1.86	3.90	5.17	5.80	6.23	5.59	4.52	3.31	2.00	-------	-------
1933	-------	-------	2.73	2.78	4.62	4.95	5.08	4.92	3.22	3.20	1.78	1.21	-------
1934	-------	-------	-------	3.15	4.71	4.31	-------	-------	4.17	2.94	1.59	-------	-------
1935	-------	-------	1.25	3.45	4.57	5.33	4.89	5.32	4.32	3.18	2.00	0.78	-------
1936	-------	-------	2.32	3.17	5.29	5.61	5.10	5.58	4.87	3.11	1.82	-------	-------
1937	-------	-------	-------	3.94	5.38	6.60	6.30	-------	5.61	3.84	2.46	1.15	-------
1938	-------	-------	-------	2.70	-------	4.65	5.16	-------	-------	2.84	2.34	1.63	-------
1939	-------	-------	-------	-------	-------	6.74	6.84	6.77	4.85	3.82	2.72	1.61	- -----
1940	-------	-------	2.90	4.88	6.43	7.32	7.98	6.60	5.28	3.71	2.01	-------	-------
1941	-------	-------	2.27	-------	5.51	7.23	6.86	4.89	5.00	2.69	1.39	-------	-------
Mean[2]	-------	-----	2.48	3.48	4.93	5.60	5.73	5.58	4.55	3.16	1.91	1.28	34.94

[1] Location in a gorge about 75 feet deep.

[2] The low monthly evaporation possibly is the result of the pan floating in a cold mountain stream.

TABLE 90

TEMPERATURE AT CROOKED CREEK, MONO COUNTY, CALIFORNIA

Year	Mean temperature in °F[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1920	-------	-------	-------	-------	-------	56	61	62	54	47	42	35	-------
1921	31	33	41	44	50	61	66	62	55	47	39	35	47
1922	7	23	30	38	50	61	67	62	58	45	23	23	41
1923	25	27	37	42	52	54	65	61	55	44	36	-------	-------
1924	29	39	34	44	53	61	63	62	55	42	36	28	46
1925	32	36	38	45	55	57	46	60	50	42	32	32	44
1926	27	23	40	47	53	62	65	62	53	46	39	19	45
1927	19	28	37	43	50	61	66	61	52	45	39	31	44
1928	32	33	41	44	55	60	66	63	56	45	32	24	46
1929	30	33	43	43	54	58	67	66	55	47	39	39	48
1930	25	38	37	48	47	62	66	62	53	44	36	28	46
1931	30	36	40	47	-------	60	69	66	53	43	30	20	-------
1932	19	21	38	48	54	62	64	63	57	45	38	26	45
1933	25	26	43	46	48	59	68	64	55	49	38	27	46
1934	19	41	51	54	58	57	64	65	56	46	38	30	48
1935	21	28	33	46	51	61	61	63	57	42	32	26	43
1936	34	26	35	48	54	60	68	64	54	45	36	24	46
1937	7	18	28	39	53	59	65	63	57	45	37	33	42
1938	32	20	27	39	49	58	63	62	57	43	34	33	43
1939	24	24	37	46	50	58	64	64	54	44	36	35	45
1940	23	28	37	44	54	63	63	64	52	45	35	28	45
1941	19	25	30	38	-------	-------	-------	-------	-------	-------	-------	-------	-------
Mean	24	29	37	44	52	60	64	63	55	45	36	29	45

[1] Records by Los Angeles Dept. of Water and Power.

TABLE 91

WIND MOVEMENT AT CROOKED CREEK, MONO COUNTY, CALIFORNIA[1]

Year	Mean wind in miles per hour												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	-------	-------	-------	-------	-------	-------	-------	1.79	2.13	2.33	1.93	2.0	-------
1935	1.43	2.95	2.91	3.37	3.71	3.12	2.80	2.06	2.33	2.72	2.60	2.0	2.67
1936	3.01	3.05	2.94	2.08	-------	-------	-------	-------	3.6	3.2	2.8	3.0	-------
1937	4.0	3.7	3.8	5.2	4.5	4.2	3.4	3.3	3.2	3.2	3.6	3.1	3.75
1938	3.1	3.9	4.5	4.2	4.3	3.6	3.4	3.2	3.2	3.2	3.8	2.8	3.60
1939	3.5	5.0	4.0	4.4	4.6	4.5	3.5	2.9	2.7	2.8	2.4	2.5	3.57
1940	2.6	3.5	3.7	4.0	3.9	3.6	3.6	2.9	4.0	3.0	3.4	3.0	3.43
1941	2.8	3.1	3.8	4.9	-------	-------	-------	-------	-------	-------	-------	-------	-------
Mean	2.92	3.60	3.66	4.02	4.2	3.80	3.34	2.69	3.02	2.92	2.93	2.63	3.31

[1] The anemometer was placed relatively near the floating pan. Records by Los Angeles Department of Water and Power.

TABLE 92

EVAPORATION AT CUYAMACA RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ____________________On Boulder Creek, a tributary of San Diego River. Lat. 32° 59′ N., Long. 116° 35′ W.[1]
  Elevation __________________4,640 feet.
Evaporation pan:
  Type ______________________Ground pan.
  Description ________________Square, 3 x 3 feet, depth 18 inches, set in ground.
Authority for data_____________La Mesa, Lemon Grove, and Spring Valley Irrigation District.
Publication reference __________None.
Meteorologic data _____________None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total May to Oct.
1935	4.91	2.97	4.70	------	9.38	10.44	10.74	9.34	10.40	9.03	7.64	5.73	59.33
1936	------	------	------	------	9.34	12.32	12.43	11.96	9.56	6.89	6.48	------	62.50
1937	------	------	------	------	7.76	11.34	11.73	10.62	9.38	8.92	------	------	59.75
1938	------	------	------	------	5.51	------	10.34	8.70	9.46	7.41	7.02	------	------
1939	------	------	------	5.76	7.82	11.58	------	------	------	7.63	------	4.66	------
1940	------	------	6.85	7.80	7.04	10.02	13.48	13.12	8.74	------	------	------	------
1941	------	------	------	------	5.23	7.24	10.10	7.80	7.27	3.90	3.30	------	41.54
1942	------	------	------	------	4.96	7.92	12.40	9.53	8.14	6.37	3.97	------	49.32
1943	------	------	------	------	5.40	5.74	9.66	9.66	9.62	6.44	------	------	46.52
1944	------	------	------	------	5.09	6.80	9.72	10.02	7.08	5.56	------	3.03	44.27
1945	------	------	------	3.58	4.22	7.45	10.13	6.77	7.24	3.64	3.36	------	39.45
Mean	------	------	------	------	6.52	9.08	11.07	9.75	8.69	6.58	------	------	51.69

[1] Cuyamaca Reservoir is located about 40 miles from the Pacific Ocean near the top of the divide which separates the semi-arid region of San Diego County from the arid region of the Imperial Valley. Owing to its location the evaporation from the reservoir is increased by the frequent occurrence of dry easterly winds from the desert.

TABLE 93

EVAPORATION AT CUYAMACA RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ____________________On Boulder Creek, a tributary of San Diego River. Lat. 32° 59′ N., Long. 116° 35′ W.[1]
  Elevation __________________4,620 feet.
Evaporation pan:
  Type ______________________Floating pan.
  Description ________________Square, 3 x 3 feet, depth 18 inches.
Authority for data_____________Volcan Land and Water Company.
Publication reference __________Trans. Am. Soc. C. E. Vol. 80 (33), W. S. P. 446 (12), and unpublished report by George Cromwell, Eng'r. for San Diego County Water Company (11).
Meteorologic data _____________Temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1913	------	------	------	------	------	9.25	8.18	7.94	9.68	6.86	5.63	2.85	------
1914	3.28	5.46	7.20	5.60	7.53	8.99	9.90	10.76	7.53	6.08	3.28	3.94	79.55
1915	3.47	3.97	4.56	3.75	4.52	9.66	8.74	10.30	6.88	8.30	3.99	4.88	73.02
1916	.68	4.65	6.26	6.57	7.21	8.25	10.05	8.68	6.11	3.15	3.82	2.40	67.83
1917	2.75	2.01	2.94	2.88	4.88	6.58	6.91	8.54	7.12	------	------	------	------
1918	------	3.61	3.00	5.24	5.85	6.20	9.02	7.11	6.65	6.24	2.45	2.38	------
1919	2.07	2.60	2.98	4.55	5.76	9.38	8.29	7.97	7.99	8.75	------	------	------
Mean	2.45	3.72	4.49	4.76	5.96	8.33	8.73	8.76	7.42	6.56	3.83	3.29	68.30

[1] Near the west margin of Cuyamaca Reservoir which is located about 40 miles from the Pacific Ocean near the top of the divide which separates the semi-arid region of San Diego County from the arid region of the Imperial Valley. Owing to its location the evaporation from the reservoir is increased by the frequent occurrence of dry easterly winds from the desert.

TABLE 94

EVAPORATION AT CUYAMACA RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ____________________On Boulder Creek, a tributary of San Diego River, three miles east of floating pan on easterly shore. Lat. 32° 59′ N., Long. 116° 32′ W.[1]
  Elevation __________________4,640 feet.
Evaporation pan:
  Type _______________________Ground pan.
  Description ________________Square, 3 x 3 feet, depth 18 inches set in ground covered with 2 inch mesh wire screen.
Authority for data_____________Volcan Land and Water Company.
Publication reference _________Trans. Am. Soc. C. E. Vol. 80 (33) and unpublished report by George Cromwell, Engr. for San Diego County Water Company (11).
Meteorologic data _____________Temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1913	-------	-------	-------	4.87	8.38	8.90	8.99	8.96	9.39	7.49	4.40	2.30	-------
1914	2.30	3.32	5.26	5.50	6.19	10.04	12.23	12.42	8.93	6.76	4.20	1.72	78.87
1915	2.93	3.12	4.77	4.29	4.92	7.94	10.22	11.14	7.80	7.85	3.90	1.57	70.45
1916	-------	2.67	5.99	5.12	8.25	10.43	8.20	9.07	8.26	5.07	4.42	2.43	-------
1917	-------	1.86	3.65	3.83	5.16	6.63	8.46	9.06	6.52	5.45	3.28	3.50	-------
1918	3.19	2.72	1.91	4.75	6.60	7.90	10.83	7.00	5.20	6.08	-------	-------	-------
Mean	2.81	2.74	4.32	4.73	6.58	8.64	9.82	9.61	7.68	6.45	4.04	2.30	69.72

[1] On easterly shore of Cuyamaca Reservoir which is located about 40 miles from the Pacific Ocean near the top of the divide which separates the semi-arid region of San Diego County from the arid region of the Imperial Valley. Owing to its location the evaporation from the reservoir is increased by the frequent occurrence of dry easterly winds from the desert.

TABLE 95

TEMPERATURES AT CUYAMACA RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Year	Mean temperature in ° F. (11) (33)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1913	35	38	39	49	56	59	67	68	65	55	45	38	51
1914	42	42	47	49	54	63	71	70	64	54	49	35	53
1915	38	40	46	48	50	65	68	70	62	58	47	42	53
1916	36	45	50	53	55	64	71	67	64	48	45	37	53
1917	33	38	40	45	47	66	73	71	67	63	51	47	53
1918	39	41	45	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
1919	40	38	40	50	56	65	72	74	66	57	45	42	54
Mean	38	40	44	49	53	64	70	70	65	56	47	40	53

TABLE 96

EVAPORATION AT DALTON RANCH, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	In San Gabriel Canyon about two miles north of Azusa. Lat. 34° 10′ N., Long. 117° 54′ W.*
Elevation	800 feet.
Evaporation pan:	
Type	Ground pan.
Description	Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data	Los Angeles County Flood Control District.
Publication reference	Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	-------	-------	-------	-------	6.88	8.02	9.72	9.67	-------	7.38	8.16	3.60	-------
1933	3.98	4.65	6.08	5.58	6.31	8.04	[1]8.84	[1]6.32	-------	7.06	8.11	3.81	-------
1934	4.72	3.10	6.12	7.14	8.54	6.42	9.66	9.59	9.34	7.04	4.92	3.88	80.47
1935	2.76	4.22	3.62	3.55	5.36	7.14	9.14	9.74	7.78	7.18	5.55	4.74	70.78
1936	4.34	2.41	4.51	4.71	7.60	8.86	10.15	9.84	8.82	6.94	7.22	4.22	79.62
1937	1.94	2.64	4.28	5.58	5.75	7.38	10.14	10.05	9.50	7.58	4.38	3.98	73.20
1938	3.74	2.97	3.63	4.94	5.94	6.26	8.17	8.52	8.40	6.94	6.42	4.00	69.93
1939	3.29	3.58	3.32	4.68	6.10	7.72	8.64	8.70	9.19	7.46	5.68	5.15	73.51
1940	2.56	2.86	4.45	4.10	6.58	7.06	9.83	8.77	7.81	7.32	5.01	3.56	69.91
1941	2.34	2.12	3.53	4.18	6.16	6.30	8.40	7.41	6.52	5.62	5.18	2.48	60.24
1942	2.90	3.14	4.86	3.06	6.66	6.62	9.56	8.15	5.46	-------	-------	-------	-------
Mean	3.26	3.17	4.44	4.75	6.53	7.26	9.30	8.80	8.09	7.05	6.06	3.94	72.65

* At foot of steep mountain slope.

[1] Incomplete.

TABLE 97

EVAPORATION AT DAVIS, YOLO COUNTY, CALIFORNIA

Station:
  Location ___________________At the University of California, Agricultural Experiment Station. Lat. 38° 32′ N., Long. 121° 44′ W.
  Elevation _________________51 feet.
Evaporation pan:
  Type ______________________U. S. Weather Bureau pan.
  Description _______________Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data___________University of California, Agricultural Experiment Station.
Publication reference _________U. S. Weather Bureau Climatological Data (41).*
Meteorologic data ___________Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1926	------	------	------	------	7.76	10.17	11.29	9.99	7.86	4.35	1.94	1.45	------
1927	0.93	1.04	3.03	5.29	8.17	9.32	10.68	8.66	7.78	4.82	1.34	1.39	62.45
1928	.89	1.82	1.94	4.80	8.46	10.79	10.27	9.87	7.62	4.99	1.79	.65	63.89
1929	.61	2.11	3.88	5.07	9.03	8.57	10.47	9.63	6.84	5.21	3.41	.79	65.62
1930	.83	2.09	3.24	4.14	6.39	9.54	10.25	10.30	6.10	4.66	2.45	1.50	61.49
1931	.80	1.78	4.64	7.06	9.42	9.76	12.08	11.16	8.30	4.93	2.86	.69	73.48
1932	1.39	2.13	4.61	6.00	8.16	10.28	11.78	10.85	7.76	6.30	3.83	1.56	74.65
1933	1.00	2.90	4.21	7.26	7.53	9.77	12.42	11.09	7.87	5.98	3.30	.70	74.03
1934	1.39	1.36	3.48	5.47	7.43	9.06	11.44	9.90	8.64	4.93	1.85	1.56	66.51
1935	.87	1.52	3.75	4.49	8.27	9.62	10.00	9.37	6.90	5.01	2.16	1.22	63.18
1936	1.46	1.28	5.14	5.80	9.25	8.39	11.10	10.22	8.61	5.54	2.75	1.52	71.06
1937	[1]1.08	2.07	3.22	6.67	9.07	8.85	10.50	9.85	7.55	4.62	2.02	1.04	66.54
1938	1.02	1.82	2.99	4.96	8.80	10.27	10.90	9.91	7.79	4.19	3.66	1.17	67.48
1939	1.55	3.29	3.85	7.66	9.23	11.34	11.53	10.27	7.58	5.18	2.70	1.36	75.54
1940	1.11	1.99	3.68	5.44	7.98	9.43	9.64	8.43	6.68	4.22	2.19	1.91	62.70
1941	1.09	1.08	3.76	5.01	7.11	8.70	9.30	8.30	8.54	5.65	1.73	1.27	61.54
1942	.76	2.00	4.01	3.86	6.84	10.30	10.95	9.40	7.58	4.97	1.84	.81	63.32
1943	1.61	1.54	2.55	5.24	9.89	9.66	10.99	9.84	7.73	4.93	2.22	1.69	67.89
1944	1.20	2.48	4.39	4.24	8.42	8.88	9.89	9.81	8.78	4.87	1.68	.64	65.28
1945	.97	2.42	2.80	7.67	7.30	11.14	11.31	9.99	9.83	5.58	1.78	.72	71.51
Mean	1.08	1.93	3.64	5.58	8.22	9.69	10.84	9.84	7.82	5.04	2.38	1.18	67.24

* Slight differences in these data and those in Climatological Data result from adjustments in the original data made by the Agricultural Experiment Station after publicaion.

[1] Estimated.

TABLE 98

TEMPERATURE AT DAVIS, YOLO COUNTY, CALIFORNIA[1]

Year	Mean temperature in °F												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1926---	42	51	60	61	65	74	76	72	66	64	57	45	61
1927---	46	50	51	56	63	70	75	71	68	63	53	44	59
1928---	44	49	55	57	67	72	74	73	70	61	50	42	60
1929---	40	47	53	54	64	75	73	74	69	65	53	49	60
1930---	44	52	54	57	59	71	73	73	66	59	54	45	59
1931---	46	53	55	62	70	70	79	75	67	60	51	45	61
1932---	45	48	56	56	63	71	73	73	72	62	57	40	60
1933---	41	46	53	58	60	69	79	76	68	68	54	45	60
1934---	48	52	59	62	67	71	74	75	72	64	55	47	62
1935---	45	49	49	57	63	72	73	74	69	60	49	46	59
1936---	48	49	55	59	65	70	76	75	72	65	53	44	61
1937---	38	47	54	57	65	70	75	74	70	64	54	47	60
1938---	44	48	50	57	65	71	75	72	71	60	51	46	59
1939---	44	47	53	63	65	71	74	73	72	62	53	48	60
1940---	48	53	56	60	66	74	72	73	69	63	52	51	61
1941---	50	52	56	58	65	70	75	72	70	62	55	49	61
1942---	47	50	53	57	62	72	76	74	70	65	53	46	60
1943---	47	50	54	59	67	68	76	72	72	62	54	48	61
1944---	46	48	54	55	65	68	73	73	73	64	51	47	60
1945---	44	50	49	60	62	73	76	73	72	64	52	-------	-------
Mean--	45	50	54	58	64	71	75	73	70	63	53	46	60

[1] These data obtained from records of the Agricultural Experiment Station prior to January, 1934, and thereafter from U. S. Weather Bureau Climatological Data (41).

TABLE 99

WIND MOVEMENT AT DAVIS, YOLO COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1927---	821	1,365	1,240	1,473	951	847	870	573	1,127	715	879	1,301	12,162
1928---	707	854	635	847	1,170	1,535	886	886	907	1,052	879	588	10,946
1929---	723	1,328	1,135	1,329	1,600	1,028	683	517	540	798	813	1,087	11,581
1930---	1,242	1,120	1,232	500	636	809	869	1,152	1,194	1,008	941	874	11,577
1931---	865	866	1,427	1,168	1,466	1,529	1,455	1,276	1,467	1,010	1,351	1,501	15,381
1932---	1,426	1,248	1,430	1,368	1,988	1,513	1,599	1,467	841	1,590	1,135	1,223	16,828
1933---	1,455	1,583	1,901	2,002	1,836	2,250	1,871	1,915	1,692	1,432	1,366	1,562	20,865
1934---	1,866	1,507	1,130	889	1,146	1,692	2,124	1,647	1,713	1,487	1,379	1,851	18,431
1935---	1,583	1,157	2,176	1,829	2,278	1,321	1,447	1,076	819	1,454	1,057	1,293	17,490
1936---	2,156	2,081	2,269	1,914	2,370	1,358	1,590	1,389	1,356	1,279	878	1,478	20,118
1937---	2,898	1,933	1,918	2,416	1,929	1,531	1,390	1,205	1,253	1,005	1,126	1,370	19,974
1938---	1,374	2,399	2,279	1,513	1,796	1,704	1,452	1,295	1,087	1,148	1,603	1,311	18,961
1939---	1,815	2,485	1,972	1,574	1,987	1,777	1,700	1,391	1,096	854	577	1,247	18,475
1940---	1,577	2,046	1,558	1,556	1,475	1,057	1,049	702	1,020	739	1,169	2,349	16,297
1941---	1,946	1,483	1,744	1,569	1,490	1,395	965	1,001	1,570	1,501	965	1,811	17,440
1942---	1,606	1,862	1,515	1,294	1,391	1,637	1,308	1,094	1,021	761	1,045	1,146	15,680
1943---	2,186	1,057	1,387	1,631	2,225	2,026	1,614	1,270	1,001	897	589	1,136	17,019
1944---	1,329	1,744	1,483	984	1,448	1,687	1,182	840	785	574	930	355	13,341
1945---	639	1,956	1,487	2,149	1,787	2,160	1,521	1,378	1,435	1,222	979	1,610	18,313
Mean--	1,485	1,583	1,575	1,474	1,630	1,519	1,346	1,162	1,154	1,080	1,035	1,320	16,363

[1] These data obtained from records of the Agricultural Experiment Station prior to January, 1934, and thereafter from U. S. Weather Bureau Climatological Data (41).

TABLE 100

EVAPORATION AT DELHI, MERCED COUNTY, CALIFORNIA

Station:	
Location	At experimental peach orchard about 4 miles east of Delhi. Lat. 37° 42′ N., Long. 120° 42′ W.
Elevation	117 feet at Delhi.
Evaporation pan:	
Type	Ground pan.
Description	Diameter 3 feet, depth 3 feet, set 2.75 feet in ground.
Authority for data	University of California, Agricultural Experiment Station.
Publication reference	None.
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1922	-------	-------	-------	-------	-------	10.40	12.01	10.46	7.15	-------	-------	-------	-------
1923	-------	1.24	1.46	2.78	6.39	7.23	9.04	7.60	5.06	3.35	1.30	1.02	-------
1924	.86	2.44	3.22	4.07	7.33	8.64	9.77	8.74	5.75	3.07	2.24	.73	56.86
1925	1.42	.71	2.10	3.43	6.10	7.48	9.00	9.16	6.59	4.43	1.51	1.69	53.62
1926	.54	.88	3.62	3.58	7.39	8.45	10.74	8.05	6.23	3.42	1.32	.98	55.20
Mean	.94	1.32	2.60	3.46	6.80	8.44	10.11	8.80	6.16	3.57	1.59	1.10	54.89

TABLE 101

TEMPERATURE AT DELHI, MERCED COUNTY, CALIFORNIA

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1923	41	45	53	56	63	64	74	72	72	60	54	42	58
1924	42	52	48	58	67	72	72	72	70	59	51	43	59
1925	47	54	55	59	65	70	76	71	63	59	49	44	59
1926	41	52	57	63	64	72	76	73	65	62	56	44	60
Mean	43	51	53	59	65	70	74	72	68	60	52	43	59

TABLE 102

WIND MOVEMENT AT DELHI, MERCED COUNTY, CALIFORNIA

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1923	2,356	2,304	2,220	3,084	2,917	2,178	2,000	3,329	2,514	2,437	1,386	2,455	29,180
1924	1,724	2,091	2,868	2,946	3,773	3,384	2,960	2,455	2,295	1,293	1,071	2,970	29,830
1925	1,305	1,635	2,393	2,388	3,022	2,529	2,830	2,347	2,139	1,463	1,245	1,609	24,905
1926	2,071	2,946	2,092	2,649	2,694	2,034	2,083	2,111	1,779	1,562	1,995	1,767	25,783
Mean	1,864	2,244	2,393	2,767	3,102	2,531	2,468	2,560	2,182	1,689	1,424	2,200	27,424

TABLE 103

EVAPORATION AT DODGELAND, BUTTE COUNTY, CALIFORNIA

Station:
  Location ------------------About 16 miles southwest of Chico at headquarters of Dodge Land Company. Lat. 39° 33′ N., Long. 121° 54′ W.
  Elevation ------------------About 160 feet.
Evaporation pan:
  Type ----------------------U. S. Weather Bureau pan.
  Description ----------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data-------------Dodge Land Company.
Publication reference ----------U. S. Weather Bureau Climatological Data (41).
Meteorologic data ------------Wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1918	-------	-------	-------	-------	-------	-------	-------	-------	6.07	4.72	1.90	.91	-------
1919	-------	1.74	2.93	5.65	9.41	11.54	12.54	10.46	-------	-------	2.67	1.14	-------
1920	1.22	2.04	3.14	5.82	9.24	10.21	10.48	8.41	6.19	3.53	1.34	1.02	62.64
1921	.89	1.52	2.64	5.90	6.49	9.16	11.24	7.53	6.27	3.67	1.21	.74	57.26
1922	1.13	1.00	3.05	6.55	8.15	9.16	8.92	7.63	4.92	1.03	2.69	.96	55.19
Mean	1.08	1.58	2.94	5.98	8.32	10.02	10.80	8.51	5.86	3.24	1.96	.95	61.24

TABLE 104

WIND MOVEMENT AT DODGELAND, BUTTE COUNTY, CALIFORNIA

Year	Total wind in miles (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1918	-------	-------	-------	-------	-------	-------	-------	-------	-------	1,778	1,526	1,732	-------
1919	1,658	2,185	1,757	1,635	1,896	2,038	1,774	1,510	-------	1,815	1,359	1,301	-------
1920	1,260	1,220	1,810	2,107	2,096	2,009	1,364	770	762	917	1,053	1,133	16,501
1921	1,725	1,006	1,309	1,742	1,217	1,103	849	617	1,101	836	740	1,500	13,745
1922	1,486	1,924	2,389	2,408	1,543	1,120	825	1,008	815	1,064	1,094	1,405	17,081
Mean	1,532	1,584	1,816	1,973	1,688	1,568	1,203	976	893	1,282	1,154	1,414	17,083

TABLE 105

EVAPORATION AT DON PEDRO RESERVOIR, TUOLUMNE COUNTY, CALIFORNIA

Station:
  Location ------------------ On Tuolumne River about 5 miles above La Grange.
  Elevation ------------------ About 600 feet.
Evaporation pan:
  Type ---------------------- Floating pan.
  Description ---------------- Square, 3 x 3 feet, depth 18 inches.
Authority for data------------- Turlock Irrigation District.*
Publication reference ---------- None.
Meteorologic data ------------- None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1924	-------	-------	-------	-------	8.51	11.30	11.80	10.20	9.00	4.43	3.27	1.79	-------
1925	.76	2.37	4.80	4.80	4.80	7.02	11.00	10.90	7.80	5.11	3.33	1.01	63.70
1926	1.56	1.36	2.48	1.39	7.80	9.80	9.80	11.40	8.70	4.59	.83	.74	60.45
1927	1.38	2.23	.87	3.36	6.35	6.23	11.10	9.30	6.80	7.19	-------	.93	-------
1928	1.80	-------	3.29	4.05	9.50	9.00	11.00	11.60	9.10	5.80	3.85	1.56	-------
1929	1.05	2.19	.89	1.91	8.50	7.82	11.50	11.60	8.30	6.30	3.80	1.01	64.87
1930	.53	2.45	4.33	5.41	3.12	9.40	11.40	10.60	7.29	5.54	3.68	1.80	65.55
1931	1.06	.39	3.36	5.95	7.70	9.20	13.00	11.00	8.40	5.68	3.34	.57	69.65
1932	1.30	.80	2.30	4.91	7.69	9.16	11.40	10.90	7.70	6.40	3.55	2.74	68.85
1933	2.65	2.01	3.12	5.20	6.84	8.08	12.70	11.80	7.14	5.94	3.80	2.31	71.59
1934	3.15	-------	3.00	7.10	7.75	9.33	11.20	11.50	8.20	4.08	-------	2.16	-------
1935	-------	-------	2.48	-------	5.10	8.60	10.30	9.50	7.60	5.08	1.06	.88	-------
1936	1.17	1.07	3.20	2.20	5.24	3.00	10.28	11.70	8.50	7.12	3.40	.89	57.87
1937	-------	-------	-------	2.15	6.90	7.20	12.40	11.10	7.90	5.87	2.64	1.00	-------
1938	[1]1.49	[1]1.50	[1]1.92	3.51	[1]5.55	[1]5.92	9.50	10.10	6.81	[1]5.26	2.28	[1]1.29	55.13
1939	[1]1.81	[1]1.54	[1]1.72	[1]4.00	[1]6.17	[1]9.40	11.30	10.90	5.56	5.60	3.08	.34	61.42
1940	.63	.48	3.43	2.82	6.00	7.90	10.40	9.90	7.10	4.42	3.42	3.07	59.57
1941	.95	.82	1.29	2.10	3.77	6.80	9.60	9.60	8.30	4.88	3.13	.89	52.13
1942	.61	.42	2.00	1.45	1.76	5.70	8.90	10.30	6.50	4.35	3.29	2.49	47.77
1943	.43	1.43	-------	3.24	5.90	6.43	10.50	10.40	7.20	5.31	.66	1.68	-------
1944	1.40	.46	-------	3.49	3.30	7.10	10.70	10.10	8.65	4.66	1.87	.99	-------
1945	.35	1.74	1.23	1.56	5.99	5.76	-------	-------	-------	-------	-------	-------	-------
Mean	1.27	1.37	2.54	3.53	6.10	7.73	10.95	10.68	7.74	5.41	2.86	1.44	61.62

* These data were obtained from a negative print in the Office of the United States Army Engineers at Sacramento except for the years 1933, 1934 and 1935 which were obtained from the Turlock Irrigation District's records.

[1] Probably the record was affected by wind and waves.

TABLE 106

EVAPORATION AT DRY CANYON RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ____________________About five miles north of Saugus. Lat. 34° 29′ N., Long. 118° 32′ W.
Elevation __________________1,507 feet at spillway level.
Evaporation pan:
Type _______________________Floating pan.
Description ________________Square, 3 x 3 feet, 18 inches deep.
Authority for data___________Los Angeles Dept. of Water and Power.
Publication reference ________None.
Meteorologic data ___________Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1933	[1]2.76	[1]1.90	3.14	4.23	5.27	6.77	8.47	8.64	7.95	6.29	6.22	2.38	64.02
1934	3.85	1.29	3.35	5.74	7.20	5.67	8.58	8.27	7.55	5.64	3.00	2.11	62.25
1935	1.62	1.75	3.06	3.90	4.56	6.98	8.66	7.96	6.99	6.65	3.96	2.87	58.96
1936	2.83	2.65	3.38	3.98	6.54	7.37	7.84	9.40	7.70	4.44	5.48	1.32	62.93
1937	1.16	1.68	1.89	5.22	4.95	6.69	9.19	9.24	7.96	7.06	3.74	2.80	61.58
1938	4.46	2.87	3.20	3.70	5.63	6.69	9.50	9.52	7.76	6.34	6.51	2.96	69.14
1939	2.74	2.59	2.44	4.34	6.10	8.44	8.88	9.22	5.82	7.17	4.44	3.85	66.03
1940	1.82	2.20	3.89	4.01	6.77	7.52	10.12	8.86	6.72	5.11	5.95	2.26	65.23
1941	1.10	1.16	2.10	[1]3.50	5.73	6.22	8.50	7.54	7.24	6.45	3.76	1.84	55.14
1942	2.65	2.63	4.09	2.98	6.14	7.64	10.54	9.73	8.16	6.54	5.22	3.21	69.53
1943	3.24	1.97	1.41	4.19	6.82	6.48	8.72	9.22	8.26	6.07	5.56	2.56	64.50
1944	2.57	2.08	5.71	4.25	4.53	5.75	8.40	9.60	6.58	5.75	2.85	3.35	61.42
Mean	2.57	2.06	3.14	4.17	5.85	6.85	8.95	8.93	7.39	6.12	4.72	2.62	63.37

[1] Partly estimated.

TABLE 107

TEMPERATURE AT DRY CANYON RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1933	-------	-------	54	55	56	67	76	75	68	68	69	52	-------
1934	54	55	64	64	66	64	75	76	72	65	57	53	64
1935	48	52	49	56	59	68	73	75	72	62	54	51	60
1936	51	48	56	58	64	72	76	75	73	64	58	50	62
1937	38	47	52	56	62	68	74	75	72	66	57	53	60
1938	52	48	50	56	61	65	73	75	74	62	55	53	60
1939	50	45	52	60	62	67	73	75	72	63	59	57	61
1940	52	50	55	58	64	70	74	76	67	67	55	54	62
1941	52	52	56	54	62	65	72	70	65	60	58	48	60
1942	50	49	54	55	61	69	77	75	70	65	59	54	62
1943	52	54	54	59	65	65	73	73	74	67	59	50	62
1944	48	47	54	55	59	62	69	76	71	64	53	52	59
Mean	50	50	54	57	62	67	74	75	71	64	58	52	61

TABLE 108

WIND MOVEMENT AT DRY CANYON RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Year	Mean wind in miles per hour												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1933	[1]4.0	[1]3.7	4.4	4.4	4.2	3.4	3.4	3.2	3.1	3.0	5.7	3.3	3.8
1934	2.3	3.1	2.1	3.6	3.7	3.7	3.6	2.9	3.2	3.4	1.9	4.8	3.2
1935	4.1	4.3	3.3	3.4	3.7	3.4	3.4	3.2	2.7	4.9	4.2	4.4	3.8
1936	4.7	3.2	3.7	3.3	3.4	3.4	3.2	3.1	3.1	3.3	5.6	4.1	3.7
1937	4.6	4.3	3.5	4.0	3.1	3.2	3.2	3.1	3.0	3.3	2.4	4.9	3.6
1938	5.3	4.5	3.8	3.5	3.1	3.0	3.1	3.1	2.5	3.2	6.1	4.0	3.8
1939	4.0	4.6	3.2	3.1	2.9	3.2	2.9	2.6	3.4	4.2	3.2	3.3	3.4
1940	3.0	3.4	5.0	3.1	2.9	2.8	3.0	2.8	2.9	2.6	4.5	3.4	3.3
1941	4.1	2.4	3.2	2.8	3.2	2.7	2.5	2.4	3.5	4.4	4.1	3.4	3.2
1942	4.1	3.6	4.0	3.4	3.2	3.1	2.9	2.7	2.6	3.1	4.1	3.4	3.4
1943	4.6	4.4	2.5	2.6	3.3	3.0	2.7	2.6	2.5	2.4	4.5	2.2	3.1
1944	3.7	3.8	4.7	2.7	2.4	2.4	2.1	2.5	2.9	2.4	3.9	3.6	3.1
Mean	4.0	3.8	3.6	3.3	3.3	4.1	3.0	2.8	3.0	3.4	4.2	3.4	3.5

[1] Partly estimated.

TABLE 109

EVAPORATION AT EAST PARK RESERVOIR, COLUSA COUNTY, CALIFORNIA

Station:
Location ---------- About three miles east of Stonyford. Lat. 39° 21′ N., Long. 122° 31′ W.
Elevation ---------- About 1,200 feet.
Evaporation pan:
Type ---------- Ground pan.
Description ---------- Diameter 4 feet, depth 3 feet, set 2.75 feet in ground.
Authority for data ---------- U. S. Bureau of Reclamation, Orland Project.
Publication reference ---------- U. S. D. A. Tech. Bull. 271 (35), Trans. Am. Soc. C. E., Vol. 90 (23).
Meteorologic data ---------- None.

Year	Evaporation in inches[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	12.21	11.28	8.08	5.32	3.16	1.04	-------
1932	1.64	1.88	3.48	4.80	5.50	8.07	10.46	9.13	7.06	5.28	2.72	.88	60.90
1933	.92	2.00	2.20	5.08	6.02	9.00	10.82	9.88	7.26	5.00	3.08	.72	61.98
1934	1.36	1.28	2.48	4.60	9.40	7.86	9.79	7.86	7.42	4.00	1.48	.97	58.50
1935	.82	1.48	2.76	2.80	5.92	9.33	9.44	8.96	6.93	4.92	2.08	1.20	56.54
1936	1.42	.84	3.52	2.68	6.75	6.65	9.39	9.24	7.50	5.12	2.84	1.40	57.35
1937	-------	1.16	1.68	4.46	6.80	7.48	9.54	9.56	6.87	3.68	1.76	1.56	-------
1938	1.16	1.72	1.32	2.72	5.94	8.40	9.44	9.06	6.64	1.72	2.56	1.28	51.96
1939	1.16	1.68	2.72	5.52	6.80	9.31	1.06	9.81	6.44	4.58	2.92	1.20	63.20
1940	.88	1.20	2.72	3.24	6.49	8.17	9.44	8.61	6.30	3.84	2.04	.68	53.61
1941	.68	.84	4.74	3.36	5.88	7.23	8.99	8.54	6.64	4.04	1.80	.76	53.50
1942	1.04	2.08	3.32	2.60	5.11	8.24	9.28	9.58	7.02	4.64	1.72	.92	55.55
1943	1.20	1.04	1.88	3.16	7.00	8.31	10.23	9.84	7.42	3.96	1.76	1.20	57.00
1944	.84	1.76	3.28	3.04	5.64	6.63	9.20	9.27	7.67	4.12	1.20	.96	53.61
1945	1.32	2.20	1.68	4.68	4.16	-------	-------	-------	-------	-------	-------	-------	-------
Mean	1.11	1.51	2.70	3.77	6.24	8.05	9.95	9.33	7.09	4.30	2.22	1.06	57.33

[1] From illustrations in U. S. D. A. Tech. Bull. 271, it would appear that this pan may have been set so close to the lake that at times of high water it could have been in saturated soil.

TABLE 110

EVAPORATION AT EAST PARK RESERVOIR, COLUSA COUNTY, CALIFORNIA

Station:	
Location	At East Park Reservoir, Orland Project. Lat. 39° 21′ N., Long. 122° 31′ W.
Elevation	About 1,150 feet.
Evaporation pan:	
Type	Floating pan.
Description	Diameter 4 feet, depth 10 inches, suspended in the water with top of the pan about 3 inches above the reservoir surface, anchored near shore.
Authority for data	U. S. Bureau of Reclamation, Orland Project.
Publication reference	U. S. D. A. Tech. Bull. 271 (35), Trans. Am. Soc. C. E., Vol. 90 (23).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1911	------	------	------	------	------	8.95	10.65	10.04	7.66	4.93	2.62	1.86	------
1912	.68	1.42	2.31	4.63	7.27	9.11	10.26	10.08	5.98	5.21	1.96	1.92	60.83
1913	.56	2.04	3.04	5.34	7.67	8.81	10.17	9.29	7.29	5.52	2.24	1.76	63.73
1914	1.70	2.20	3.72	4.36	6.68	8.33	10.20	10.18	8.18	4.04	2.80	1.52	63.91
1915	.80	.92	2.52	3.52	4.36	8.88	10.66	9.39	8.30	5.03	2.52	1.56	58.46
1916	1.08	1.32	3.08	5.52	8.06	9.02	9.24	9.18	7.11	2.64	2.06	1.08	59.39
1917	1.16	1.28	3.56	5.60	6.12	8.89	11.42	9.90	7.42	5.68	2.36	1.76	65.06
1918	1.30	1.36	1.96	5.16	8.56	9.88	11.18	9.75	5.64	4.28	2.04	1.32	62.43
1919	.92	1.16	1.20	5.04	8.46	9.43	10.79	9.55	7.12	4.48	2.12	1.00	61.27
1920	1.56	1.48	1.92	4.12	8.13	9.52	10.87	10.02	6.36	2.50	1.60	1.24	59.32
1921	1.24	2.68	2.68	3.92	5.72	8.07	10.13	9.91	8.02	3.92	2.16	1.12	59.57
1922	1.16	.96	3.08	5.84	7.63	8.70	10.80	10.60	7.49	4.76	3.00	1.68	65.70
1923	1.44	2.92	4.36	3.92	7.98	7.69	10.63	10.13	7.14	5.08	3.52	2.20	67.01
1924	1.28	1.32	2.60	5.96	8.67	10.66	11.45	9.71	9.26	6.86	3.56	.68	72.01
1925	1.28	.76	3.36	2.96	3.68	6.19	9.03	9.32	6.30	4.05	1.80	1.16	49.89
1926	1.00	.76	3.60	3.20	6.40	8.03	9.83	7.26	5.72	2.88	1.76	2.12	52.56
1927	1.16	.80	2.52	4.28	7.06	7.70	9.49	9.08	6.71	5.00	1.32	1.00	56.12
1928	.92	1.24	1.72	3.16	6.98	8.87	9.90	10.07	8.62	5.09	1.76	.84	59.17
1929	.56	1.44	2.96	4.80	7.76	8.08	10.27	10.59	6.98	3.80	2.92	1.16	61.32
1930	.52	1.04	2.60	3.84	6.22	8.68	10.85	10.57	6.78	4.68	2.92	1.80	60.50
1931	.88	1.12	2.96	4.88	7.06	9.59	------	------	------	------	------	------	------
Mean	1.06	1.41	2.79	4.50	7.02	8.71	10.39	9.73	7.20	4.52	2.35	1.44	61.12

TABLE 111

EVAPORATION AT EDISON CANAL INTAKE, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ------------------In San Gabriel Canyon at site of San Gabriel Dam No. 1. Lat. 34° 13′ N., Long. 117° 52′ W.[1]
Elevation ------------------1,275 feet.
Evaporation pan:
Type ----------------------Ground pan.
Description ----------------Diameter 2 feet, depth 3 feet, set 2.75 feet in ground.
Authority for data-------------Los Angeles County Flood Control District.
Publication reference ----------Annual reports of Los Angeles County Flood Control District (28).
Meteorologic data -------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	-------	8.78	8.50	5.24	3.51	1.31	-------
1932	1.69	2.02	4.14	5.44	6.05	7.16	8.90	9.76	7.69	6.64	4.94	1.96	66.39
1933	1.58	2.93	4.46	5.14	5.70	7.64	8.17	8.71	6.77	6.35	4.90	2.14	64.49
1934	2.31	2.10	4.81	5.61	5.93	7.59	9.81	8.36	7.06	4.14	2.94	1.85	62.51
1935	1.62	1.97	2.62	3.13	4.10	6.78	8.02	7.85	6.66	5.28	3.13	2.42	53.58
1936	2.16	1.40	3.64	4.06	6.15	7.35	7.92	8.48	7.62	5.00	3.68	1.82	59.28
1937	.95	1.76	3.18	5.19	5.02	6.76	8.12	8.42	7.74	5.94	3.57	-------	-------
Mean	1.72	2.03	3.81	4.76	5.49	7.21	8.49	8.62	7.43	5.51	3.81	1.92	60.80

[1] In Ocober, 1939, records were continued at approximately this location except that the pan was located on top of San Gabriel Dam No. 1 at elevation of 1,481 feet.

TABLE 112

EVAPORATION AT EL CAPITAN RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA[1]

Station:
Location ------------------On San Diego River. Lat. 32° 53′ N., Long. 116° 48′ W.
Elevation ------------------613 feet.
Evaporation pan:
Type ----------------------Ground pan.
Description ----------------Square, 3 x 3 feet, depth 18 inches, set in ground 15 inches, painted black.
Authority for data-------------San Diego Water Department, Division of Water Development and Conservation.
Publication reference ----------None.
Meteorologic data -------------Air and water temperatures.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935	-------	-------	-------	-------	-------	-------	-------	-------	-------	6.36	4.08	3.11	-------
1936	3.55	-------	4.53	5.83	8.98	9.76	10.52	9.88	8.90	5.89	5.10	2.41	-------
1937	1.80	-------	3.29	5.83	6.55	8.69	9.81	10.01	8.97	7.14	4.34	-------	-------
1938	3.42	2.20	2.94	5.34	6.40	9.04	10.40	9.20	9.44	6.48	5.74	3.17	73.77
1939	2.43	2.73	3.15	5.67	8.27	10.24	11.00	10.06	6.34	6.08	3.98	3.39	73.34
1940	1.84	2.33	4.60	5.29	8.96	9.40	11.79	10.06	7.80	6.83	4.35	3.40	76.65
1941	1.72	1.76	3.30	3.38	6.10	8.08	9.46	9.37	7.67	5.35	4.06	2.00	62.25
1942	2.59	2.81	4.83	4.10	8.04	9.36	11.04	10.38	8.78	7.01	4.89	3.50	77.33
1943	3.30	2.87	3.25	4.18	9.98	9.23	12.28	9.53	8.88	6.18	5.92	2.06	77.66
1944	2.57	1.96	4.44	5.11	6.54	7.43	10.46	10.15	8.56	6.43	2.82	2.92	69.39
1945	-------	2.78	4.54	5.54	7.95	7.77	10.11	8.20	8.36	6.61	4.91	2.69	-------
Mean	2.58	2.43	3.89	5.03	7.78	8.90	10.69	9.68	8.37	6.40	4.56	2.86	73.17

[1] For estimated long term monthly and annual evaporation from El Capitan Reservoir see report on San Diego County Investigation, Calif. Dept. of Pub. Wks. Bull. No. 48 (42).

TABLE 113

EVAPORATION AT EL CAPITAN RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ____________________On San Diego River. Lat. 32° 53′ N., Long. 116° 48′ W.
  Elevation ____________________750 feet.
Evaporation pan:
  Type ________________________Floating pan.[1]
  Description _________________Square, 3 x 3 feet, depth 18 inches, set 11 inches in the water, painted black.
Authority for data_____________San Diego Water Department, Division of Water Development and Conservation.
Publication reference __________None.
Meteorologic data ______________Air and water temperatures.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935	-------	-------	-------	-------	-------	-------	-------	-------	-------	6.94	4.53	3.02	-------
1936	3.06	-------	4.31	5.43	7.65	8.17	8.70	8.24	7.83	5.58	5.28	3.17	-------
1937	1.88	-------	5.99	5.52	5.22	7.05	7.91	8.14	7.59	5.85	3.77	-------	-------
1938	3.99	2.60	2.94	4.94	5.60	7.06	7.91	7.51	8.20	5.86	5.56	-------	-------
1939	-------	-------	-------	-------	6.68	7.94	8.42	7.67	-------	6.39	-------	-------	-------
1940	-------	-------	-------	-------	-------	6.92	9.18	7.67	6.52	-------	-------	-------	-------
1941	-------	-------	-------	-------	6.90	7.73	8.93	8.26	7.71	6.20	5.48	3.46	-------
1942	3.47	3.21	4.97	3.97	7.02	7.80	8.44	8.87	8.34	6.97	5.73	4.30	74.09
1943	2.95	3.13	3.02	3.07	10.07	8.92	11.57	8.69	8.61	6.88	7.34	2.90	77.15
1944	3.50	1.96	5.06	5.29	5.92	6.56	8.69	9.84	7.80	6.30	3.71	3.89	68.52
1945	-------	3.32	2.96	5.68	7.33	6.66	7.45	7.44	8.23	6.70	5.89	3.27	-------
Mean	3.14	2.84	4.18	4.84	6.93	7.48	8.82	8.23	7.87	6.37	5.25	3.43	69.38

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[1] The water surface in this pan, when viewed by the author, was above the water level of the reservoir, a condition that is conductive to a high rate of pan evaporation.

TABLE 114

TEMPERATURE AT EL CAPITAN RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA[1]

Year	Mean air temperature in ° F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935	-------	-------	-------	-------	-------	-------	-------	-------	-------	67	59	57	-------
1936	57	55	61	63	68	72	79	78	75	69	65	57	67
1937	47	55	60	62	66	72	77	77	77	71	63	61	66
1938	59	56	57	62	71	70	75	77	78	68	62	61	66
1939	55	51	57	65	66	71	76	78	77	71	65	63	66
1940	58	58	62	64	69	72	77	76	73	70	63	62	67
1941	56	59	60	59	68	69	76	76	70	67	65	55	65
1942	57	54	58	59	65	69	76	74	71	67	62	57	64
1943	56	57	58	60	66	68	74	74	74	-------	-------	-------	-------
1944	-------	-------	-------	-------	64	65	71	75	71	65	57	56	-------
1945	-------	53	52	57	61	66	74	78	76	69	61	56	-------
Mean	56	55	58	61	66	69	76	76	74	68	62	58	65

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[1] Records by San Diego Water Department, Division of Water Development and Conservation.

TABLE 115

WATER TEMPERATURE AT EL CAPITAN RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA[1]

Year	Mean water temperature in ° F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935	-------	-------	-------	-------	-------	-------	-------	-------	-------	68	58	54	-------
1936	54	54	60	64	71	74	78	78	74	68	60	56	66
1937	50	51	56	63	69	72	77	78	76	67	59	53	64
1938	53	55	57	62	67	72	76	77	76	69	62	57	65
1939	55	54	56	64	69	73	77	77	76	70	64	60	66
1940	57	56	60	65	71	74	76	76	74	70	64	58	67
1941	56	57	60	61	70	73	76	76	73	68	64	58	66
1942	55	54	54	57	59	71	73	74	71	69	62	57	63
1943	55	56	59	63	70	72	75	77	75	71	62	56	66
1944	54	54	56	61	66	69	73	75	74	68	62	56	64
1945	-------	54	55	57	65	68	73	77	74	67	59	52	-------
Mean	54	54	57	62	68	72	75	76	74	69	61	56	65

[1] Water temperatures are averages of morning and afternoon recordings. Records by San Diego Water Department, Division of Water Development and Conservation.

TABLE 116

EVAPORATION AT EL SEGUNDO, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ------------------ At Standard Oil Company refinery. Lat. 33° 55′ N., Long. 118° 25′ W.
Elevation ------------------ 135 feet.
Evaporation pan:
Type ------------------ Ground pan.
Description ------------------ Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data ------------------ Los Angeles County Flood Control District.
Publication reference ------------------ Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------------ None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	-------	-------	-------	-------	-------	-------	-------	-------	-------	5.00	4.40	3.53	-------
1933	2.88	3.90	5.14	6.08	7.58	6.35	6.66	7.20	4.99	4.06	4.39	2.52	61.75
1934	2.90	2.77	4.36	5.84	7.82	7.20	7.14	7.26	6.11	4.60	3.60	3.09	62.69
1935	3.24	3.84	4.38	5.26	6.70	5.97	8.09	7.72	5.96	5.74	3.92	3.27	64.09
1936	3.48	3.03	5.16	4.98	7.55	7.75	8.05	7.52	6.56	4.89	4.88	3.56	67.49
1937	3.56	2.71	5.06	6.56	6.36	8.08	9.06	7.57	7.04	5.12	3.46	3.50	68.08
1938	3.80	3.58	5.84	6.77	7.30	8.06	8.54	8.94	6.92	6.06	5.68	3.98	75.47
1939	3.37	4.64	4.60	6.28	7.66	9.34	[1]9.34	8.21	-------	-------	-------	-------	-------
Mean	3.32	3.50	4.93	5.97	7.28	7.54	8.12	7.79	6.26	5.07	4.33	3.35	67.46

[1] Partly estimated.

TABLE 117

EVAPORATION AT ENCINO RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ____________________ On crest of Encino earth dam at southern edge of San Fernando Valley. Lat. 34° 09′ N., Long. 118° 31′ W.*
Elevation ____________________ Approx. 1,020 feet.
Evaporation pan:
Type ____________________ U. S. Weather Bureau pan.
Description ____________________ Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data ____________ Los Angeles Dept. of Water and Power.
Publication reference __________ None.
Meteorologic data _____________ Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	-------	-------	-------	-------	-------	-------	9.98	11.14	7.21	6.56	7.15	3.32	-------
1933	[1]4.26	5.00	6.85	6.35	8.39	9.68	11.39	10.03	6.52	6.93	6.80	2.81	85.01
1934	4.94	2.81	6.18	7.96	9.50	6.49	10.62	9.50	8.60	6.44	3.00	2.03	78.07
1935	2.97	3.79	3.67	5.01	5.98	8.52	10.73	11.12	8.30	6.40	3.83	3.28	73.60
1936	3.90	2.50	4.91	5.74	8.50	10.43	11.10	11.06	9.20	6.15	5.59	2.56	81.64
1937	2.01	2.40	3.92	7.39	6.32	8.38	11.05	10.48	9.31	6.67	3.33	2.55	73.81
1938	3.44	1.80	3.36	6.18	7.52	7.48	9.95	10.44	9.30	6.36	5.24	3.53	74.60
1939	3.91	3.95	3.36	5.89	7.31	8.40	10.56	9.83	9.13	6.20	4.30	3.37	76.21
1940	2.70	2.66	4.44	4.20	7.79	8.11	10.83	9.36	7.95	6.67	4.52	3.17	72.40
1941	1.73	1.50	4.00	4.30	8.79	7.72	9.77	8.26	7.11	4.76	4.20	2.38	64.52
1942	2.84	3.34	6.10	4.87	7.71	7.96	11.86	10.23	7.00	5.92	4.59	3.74	76.16
1943	3.47	3.73	4.08	5.79	8.16	8.97	10.04	9.87	9.53	6.42	5.09	3.09	78.24
1944	2.92	3.27	6.38	6.25	6.57	6.83	9.04	10.97	7.23	5.81	4.03	3.41	72.71
1945	3.32	3.24	4.09	7.10	7.69	6.87	9.87	9.75	8.98	5.23	4.17	3.11	73.42
Mean	3.26	3.08	4.72	5.92	7.71	8.14	10.48	10.14	8.24	6.18	4.70	3.02	75.59

* Pan is exposed to north winds.

[1] Estimated.

TABLE 118

EVAPORATION AT ENCINO RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	On crest of Encino earth dam at southern edge of San Fernando Valley. Lat. 34° 09′ N., Long. 118° 31′ W.*
Elevation	Approx. 1,020.
Evaporation pan:	
Type	Ground pan.
Description	Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data	Los Angeles County Flood Control District.
Publication reference	Annual Reports Los Angeles County Flood Control District (28).
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1933	4.93	5.30	7.19	7.07	9.39	9.14	11.39	10.79	8.06	7.80	7.57	3.46	92.09
1934	4.96	3.06	7.30	9.03	11.34	7.72	12.14	10.76	10.93	7.84	4.51	3.80	93.39
1935	2.71	4.29	3.94	5.85	7.26	8.98	11.90	11.98	9.56	7.62	4.82	3.89	82.80
1936	4.21	2.22	5.32	6.40	9.84	10.94	12.18	12.42	10.58	6.75	6.88	3.48	91.22
1937	2.32	2.58	4.25	8.38	7.69	9.44	13.42	11.56	10.58	8.14	4.44	4.09	86.89
1938	4.54	2.69	4.37	6.78	9.32	8.36	11.70	12.12	11.36	8.26	6.68	3.95	90.13
1939	3.18	3.89	4.18	7.79	8.46	10.48	12.07	11.73	10.68	8.93	[1]5.58	4.28	91.25
1940	2.08	[1]3.16	5.28	7.06	9.46	9.28	13.70	10.91	9.90	7.52	5.78	3.13	87.26
1941	1.92	1.65	3.51	4.44	9.30	8.88	10.43	10.00	8.48	6.85	5.66	2.19	73.31
1942	3.20	3.76	6.66	4.80	8.84	9.36	11.78	10.02	7.61	6.11	4.86	3.40	80.40
1943	3.52	3.36	3.35	5.66	8.68	9.48	10.29	10.81	9.98	6.88	5.84	2.60	80.45
1944	2.89	2.34	5.60	6.46	6.96	7.21	8.71	10.97	7.66	5.64	2.90	3.47	70.81
1945	3.46	2.90	3.24	6.60	8.19	6.66	9.56	10.89	8.84	5.48	4.35	2.59	72.76
Mean	3.38	3.17	4.94	6.64	8.82	8.92	11.48	11.15	9.56	7.22	5.37	3.41	84.06

* Pan is exposed to north winds.

[1] Partly estimated.

TABLE 119

EVAPORATION AT ENCINO RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	At northern edge of Encino reservoir, San Fernando Valley, adjacent to face of earth dam. Lat. 34° 09′ N., Long. 118° 31′ W.*
Elevation	Approx. 1,020 feet.
Evaporation pan:	
Type	Floating pan.
Description	Square, 30 x 30 inches, 18 inches deep.
Authority for data	Los Angeles Department of Water and Power.
Publication reference	None.
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	-------	-------	-------	-------	-------	-------	9.19	7.14	6.47	4.56	3.95	-------
1931	4.36	6.19	5.66	4.90	6.07	7.84	9.60	8.91	7.84	5.95	4.79	[1]1.83	73.94
1932	4.19	[1]1.64	5.14	6.64	6.16	7.65	8.39	10.04	7.10	6.25	5.41	3.39	72.00
1933	[1]3.66	3.59	4.93	5.57	7.14	8.08	9.28	9.41	6.86	6.15	5.75	2.69	73.11
1934	3.86	1.52	4.76	6.88	8.46	6.49	9.23	8.89	8.14	6.01	3.27	1.36	68.87
1935	[1]1.20	2.39	2.42	3.84	5.60	7.26	8.26	8.30	7.45	6.22	3.30	2.71	59.95
1936	2.74	[1]2.40	3.59	4.72	7.28	8.64	9.33	9.57	7.67	5.35	4.78	2.70	68.77
1937	1.87	[1]2.20	2.52	6.37	6.20	7.03	9.11	8.51	7.70	5.51	3.51	2.13	62.66
1938	3.23	[1]1.50	3.12	5.33	6.57	7.07	8.40	9.90	7.74	6.26	6.00	3.20	68.32
1939	3.30	3.44	2.92	4.90	6.45	7.28	8.71	8.90	8.30	6.19	4.22	3.21	67.82
1940	1.90	2.69	4.08	4.10	7.15	7.19	9.81	8.60	7.50	5.80	5.37	2.50	66.69
1941	1.50	1.20	3.60	4.02	7.64	7.05	8.83	7.68	6.59	4.93	4.68	1.71	59.43
1942	2.45	2.84	4.77	3.68	6.94	7.44	10.02	8.81	6.93	5.20	4.69	3.29	67.06
1943	2.71	2.77	3.25	4.46	7.21	8.56	9.08	9.26	8.64	6.45	5.20	2.32	69.91
1944	2.54	2.45	4.95	5.58	5.86	6.51	7.56	9.19	6.60	5.25	3.59	2.95	63.03
1945	2.61	2.53	2.81	5.56	6.87	5.89	7.71	8.38	7.50	4.43	4.28	3.05	61.62
Mean	2.87	2.62	3.90	5.10	6.77	7.33	8.89	8.97	7.48	5.78	4.59	2.69	66.99

* Protected from north winds by crest of dam.

[1] Partly estimated.

TABLE 120

AIR TEMPERATURE AT ENCINO RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA[1]

Year	Temperature in °F												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	77	75	69	64	54	49	-------
1932	48	51	58	60	60	64	69	70	71	65	64	50	61
1933	50	49	56	55	58	63	71	71	65	67	63	53	60
1934	57	55	63	62	64	62	72	71	70	66	59	54	63
1935	53	55	51	58	59	65	71	74	70	63	57	56	61
1936	53	51	58	59	63	69	74	75	73	67	64	54	63
1937	43	52	56	60	65	69	75	76	74	69	62	59	63
1938	58	53	55	60	65	67	73	76	74	63	60	60	64
1939	54	51	56	64	63	69	74	76	75	69	65	62	65
1940	56	56	60	61	66	69	73	74	69	68	62	59	64
1941	55	57	58	58	67	66	74	73	69	65	64	55	63
1942	56	53	56	57	63	67	76	74	70	67	62	57	63
1943	56	57	57	61	66	66	73	73	74	68	64	54	64
1944	54	51	58	57	62	63	69	75	73	67	64	58	63
1945	57	56	54	60	62	66	75	76	75	67	62	55	64
Mean	54	53	57	59	63	66	73	74	71	66	62	56	63

[1] Records by Los Angeles Dept. of Water and Power.

TABLE 121

WATER TEMPERATURES AT ENCINO RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA[1]

Year	Mean temperature in °F												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	84	82	77	70	62	53	-------
1932	51	53	61	68	70	75	79	79	76	69	62	55	66
1933	50	49	58	64	67	75	80	82	74	71	63	56	66
1934	54	56	64	69	75	73	78	80	76	70	63	55	68
1935	53	54	55	64	67	76	78	80	77	68	58	54	65
1936	52	53	61	65	73	76	80	79	76	70	61	56	67
1937	48	51	58	60	71	75	80	78	75	68	63	57	65
1938	54	53	57	64	69	75	77	80	77	68	60	55	66
1939	53	51	62	66	70	75	79	78	76	68	62	58	66
1940	55	55	60	65	71	76	79	79	75	70	63	57	67
1941	54	57	60	61	70	74	79	79	74	68	63	56	66
1942	53	-------	59	64	69	76	80	81	75	70	64	58	-------
1943	53	56	62	66	72	73	79	81	77	72	63	56	68
1944	52	53	58	65	70	72	76	80	77	71	64	56	66
1945	54	55	56	63	70	72	80	80	77	70	61	55	66
Mean	53	54	59	65	70	74	79	80	76	70	62	56	67

[1] These are not necessarily average water temperatures as they are the means of spot readings taken at the time of the regular evaporation observations. They should approximate reservoir water temperatures, however, as temperature changes of bodies of water are slow and daily changes generally are small. Records by Los Angeles Dept. of Water and Power.

TABLE 122

WIND MOVEMENT AT ENCINO RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA[1]

Year	Mean wind in miles per hour												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1933	-------	-------	-------	-------	-------	-------	4.12	4.30	3.95	4.30	5.46	4.79	-------
1934	5.91	4.83	4.29	4.78	4.85	4.82	4.61	3.87	4.81	5.09	5.36	5.57	4.90
1935	4.95	5.43	4.74	4.39	4.40	3.80	4.44	4.70	3.99	5.53	4.97	5.22	4.71
1936	5.47	5.36	4.59	4.54	5.13	4.93	4.67	4.84	4.98	4.62	5.41	5.53	5.00
1937	5.67	4.75	5.07	5.39	4.21	4.40	4.13	4.04	4.18	4.29	3.85	5.24	4.60
1938	5.12	5.77	6.11	5.03	4.55	3.46	3.69	4.14	3.68	4.53	5.02	5.18	4.69
1939	4.96	5.43	3.92	4.05	4.22	4.19	3.75	3.78	5.09	4.50	3.96	4.12	4.33
1940	3.73	4.76	4.05	4.27	3.97	3.41	4.00	3.50	4.71	4.34	4.49	4.19	4.12
1941	4.15	4.92	4.73	4.55	4.48	3.93	3.46	3.59	3.80	4.10	4.07	3.57	4.11
1942	3.70	4.10	5.20	4.70	4.50	4.20	4.20	4.20	4.20	4.20	4.40	4.50	4.34
1943	6.00	5.48	4.06	4.25	4.31	4.88	3.90	3.99	3.93	3.84	4.26	4.20	4.43
1944	4.17	4.95	5.10	3.92	3.80	4.03	2.82	3.43	3.20	2.72	3.38	2.90	3.70
1945	3.01	3.71	3.60	3.52	3.84	2.98	2.31	3.30	3.39	3.06	4.01	4.60	3.44
Mean	4.74	4.96	4.62	4.45	4.36	4.09	3.85	3.98	4.15	4.24	4.51	4.58	4.38

[1] Anemometer 7 feet above crest of dam. Subject to north winds. Records by Los Angeles Dept. of Water and Power.

TABLE 123

EVAPORATION AT ESCONDIDO CANAL INTAKE, SAN DIEGO COUNTY, CALIFORNIA

Station:	
Location	On San Luis Rey River about 8 miles below Henshaw Dam. Lat. 33° 16′ N., Long. 116° 53′ W.[1]
Elevation	1,770 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	Escondido Mutual Water Co.
Publication reference	Utilization of the Waters of Lower San Luis Rey Valley, San Diego County, Calif. (32).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1941	1.89	1.63	3.28	3.11	5.91	6.98	9.15	7.45	-------	3.75	3.58	2.25	-------
1942	3.31	1.80	-------	4.17	6.60	7.71	10.55	9.26	6.78	3.51	3.28	2.10	-------
1943	-------	-------	-------	4.67	-------	6.51	-------	8.79	-------	-------	-------	2.42	-------
Mean	2.60	1.72	3.28	3.98	6.26	7.07	9.85	8.50	6.78	3.63	3.43	2.26	59.36

[1] Station in bottom of steep walled canyon is partly protected by canyon walls.

TABLE 124

EVAPORATION AT FAIRMONT RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	About 17 miles west of Lancaster. Lat. 34° 42′ N., Long. 118° 14′ W.
Elevation	3,050 feet.
Evaporation pan:	
Type	Ground pan.
Description	Square, 3 x 3 feet, depth 18 inches, set in ground.
Authority for data	Los Angeles Dept. of Water and Power.
Publication reference	Calif. Dept. Pub. Wks. Bull. No. 44 (6).
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1924	[1]2.88	3.57	5.75	7.31	14.15	15.75	16.67	17.91	14.35	7.70	4.42	[1]2.91	113.37
1925	3.46	4.11	6.92	7.14	9.14	12.16	[1]17.48	[1]15.92	[1]11.02	[1]7.42	4.20	2.85	101.82
1926	3.02	3.02	4.97	4.53	10.58	16.26	18.51	16.47	12.12	8.43	5.75	2.09	105.75
1927	3.02	3.82	4.89	7.52	11.31	12.74	16.89	15.34	9.64	8.14	3.99	1.73	99.03
1928	2.14	3.58	5.09	7.61	10.51	13.64	16.27	16.44	11.83	7.33	4.12	2.50	101.06
1929	2.94	3.24	5.22	6.48	12.25	11.67	18.08	16.08	10.13	7.84	5.51	4.44	103.88
1930	2.81	4.10	4.59	8.06	8.79	14.24	17.69	14.92	9.47	6.10	4.54	1.81	97.12
1931	2.74	3.13	6.85	7.56	12.12	12.76	18.26	14.27	9.63	6.41	3.42	2.26	99.41
1932	2.39	2.67	5.98	7.66	9.42	14.36	17.62	16.00	12.15	7.63	5.70	2.24	103.82
1933	2.61	5.70	6.08	7.29	8.56	12.00	14.64	12.71	9.80	6.77	4.08	1.67	91.91
1934	2.55	2.92	6.24	9.25	11.51	10.69	15.76	14.11	10.59	5.76	3.38	1.26	94.02
1935	1.07	2.41	3.59	5.35	9.28	14.18	14.52	12.22	10.50	7.01	3.33	2.80	86.26
1936	2.66	1.84	5.35	7.70	11.28	12.63	14.36	14.94	10.91	5.95	4.00	0.97	92.59
1937	1.64	1.58	5.42	7.55	10.61	12.64	15.55	15.35	11.14	7.28	4.62	2.15	95.53
1938	2.29	1.43	3.54	6.32	9.72	13.51	15.75	13.91	10.77	6.42	4.52	2.70	90.88
1939	2.14	2.92	4.17	7.63	10.78	14.43	16.17	15.78	8.29	6.45	4.15	3.08	95.99
1940	1.79	2.81	5.88	7.79	12.85	16.81	17.85	17.68	10.80	7.50	4.04	2.44	108.24
1941	1.23	1.16	3.48	4.69	10.43	11.88	16.63	13.39	9.86	5.41	3.66	1.03	82.85
1942	2.29	3.01	5.33	5.96	10.68	14.69	18.43	16.38	11.43	7.42	4.68	3.11	103.41
1943	3.20	2.79	4.48	7.46	12.25	12.89	16.83	15.46	13.17	7.29	4.36	2.84	103.02
1944	1.96	3.00	5.29	6.85	10.52	10.63	16.39	15.83	11.89	7.54	2.69	2.41	95.00
Mean	2.42	2.99	5.20	7.03	10.80	13.36	16.68	15.29	10.93	7.04	4.24	2.35	98.33

[1] Partly estimated.

TABLE 125

TEMPERATURE AT FAIRMONT RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA[1]

Year	Mean temperature in °F												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1924	46	54	49	56	69	73	79	80	77	60	54	45	62
1925	47	52	54	58	64	73	81	77	69	62	52	50	62
1926	46	51	56	60	68	79	82	80	72	67	57	42	63
1927	46	48	49	56	63	70	80	78	68	65	54	42	60
1928	48	50	56	59	68	71	79	77	74	61	50	43	61
1929	43	43	49	50	64	75	79	83	74	69	59	55	62
1930	45	55	54	61	59	76	83	82	70	63	56	47	62
1931	49	50	58	66	68	70	80	80	69	61	47	40	62
1932	39	43	49	48	58	72	80	78	78	76	62	56	62
1933	40	41	51	52	57	71	82	80	72	68	54	44	59
1934	46	49	60	64	68	66	79	80	73	63	54	46	62
1935	43	46	46	54	59	76	77	78	76	59	48	45	59
1936	46	45	54	60	65	73	80	81	72	62	53	41	61
1937	31	42	48	54	63	71	80	81	75	65	55	48	59
1938	46	43	45	56	63	70	80	77	75	59	46	47	59
1939	44	40	50	60	64	72	79	80	70	59	55	50	60
1940	46	45	52	58	66	77	78	80	69	64	50	47	61
1941	44	44	50	52	63	68	78	74	68	57	54	44	58
1942	45	44	50	53	59	72	82	79	72	65	54	50	60
1943	47	49	52	58	65	66	77	76	76	63	53	44	60
1944	43	42	49	51	61	62	74	78	73	64	48	46	58
Mean	44	46	51	56	73	72	79	79	72	63	53	46	61

[1] Records by Los Angeles Dept. of Water and Power.

TABLE 126

WIND MOVEMENT AT FAIRMONT RESERVOIR, LOS ANGELES, CALIFORNIA*

Year	Mean wind in miles per hour												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1924	7.8	11.8	13.8	13.6	16.6	14.6	13.8	13.3	11.1	11.9	7.9	7.4	12.0
1925	4.0	4.7	10.3	15.1	14.1	13.7	13.9	13.3	11.3	9.4	8.2	6.3	10.4
1926	7.8	10.6	11.5	13.2	12.5	14.4	13.4	13.1	11.4	9.6	8.8	8.3	11.2
1927	7.5	12.4	12.5	14.3	16.5	14.8	13.7	11.3	12.3	8.6	8.4	7.7	11.7
1928	6.5	9.5	11.8	16.6	14.4	18.2	13.2	13.1	10.9	8.7	7.6	8.2	11.6
1929	9.5	10.3	12.1	-------	-------	-------	14.7	10.4	10.8	7.9	6.0	8.8	-------
1930	8.5	8.7	9.7	13.6	8.3	13.6	13.1	10.7	10.4	7.6	7.9	5.2	9.8
1931	6.4	8.6	13.2	11.8	11.2	13.9	12.8	10.3	9.6	9.3	9.6	7.7	10.4
1932	10.2	7.8	13.9	15.5	10.8	12.8	9.2	11.5	9.2	9.1	7.2	8.5	10.5
1933	9.3	8.2	11.7	13.2	9.2	11.3	11.4	10.1	6.1	7.5	5.3	6.1	9.1
1934	6.6	9.8	9.8	12.8	13.5	13.7	7.7	[1]8.5	9.3	7.9	9.5	6.4	9.6
1935	7.6	8.3	11.6	12.4	15.8	15.1	11.6	10.2	8.5	9.9	7.2	7.6	10.5
1936	9.4	11.2	11.3	12.8	14.2	12.0	12.0	10.6	9.2	7.9	5.8	6.3	10.2
1937	7.0	10.5	12.7	14.2	12.1	13.8	11.8	12.2	9.2	8.3	7.7	6.9	10.5
1938	7.8	8.3	14.4	13.0	13.2	16.4	12.6	12.0	8.3	8.6	8.5	7.3	10.9
1939	8.5	12.8	10.3	11.8	14.3	13.9	12.9	11.4	8.0	7.7	5.4	7.9	10.4
1940	8.7	11.3	13.1	15.4	-------	-------	-------	11.6	4.4	-------	-------	6.9	-------
1941	9.0	8.5	9.7	13.8	16.0	15.6	12.2	12.5	11.6	9.9	6.8	9.5	11.2
1942	7.3	10.0	11.2	14.7	16.4	18.9	14.2	13.6	10.6	11.0	11.2	10.6	12.5
1943	10.2	9.6	12.6	14.1	17.6	14.4	12.6	12.3	9.6	10.0	6.5	7.0	11.4
1944	7.6	10.1	12.9	17.3	14.4	14.8	13.5	13.8	12.5	8.3	9.5	6.6	11.8
Mean	8.0	9.7	11.9	14.0	13.7	14.5	12.5	11.7	9.7	9.0	7.8	7.5	10.8

* Anemometer about 7 feet above ground. Records by Los Angeles Dept. of Water and Power.
[1] Partly estimated.

TABLE 127

EVAPORATION AT FALL RIVER MILLS (NEAR), SHASTA COUNTY, CALIFORNIA

Station:	
Location	About two miles northwest of Fall River Mills and 300 feet east of the intake of Pacific Gas and Electric Company Pit No. 1 power house. Lat. 41° 01′ N., Long. 121° 28′ W.[1]
Elevation	3,340 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	U. S. Weather Bureau.
Publication reference	U. S. Weather Bureau Climatological Data (41).
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	-------	3.68	4.44	6.03	8.49	9.52	8.07	4.58	3.03	1.73	-------	-------
1931	-------	2.03	3.40	5.20	7.24	7.50	10.73	9.76	6.05	3.62	-------	-------	-------
1932	-------	-------	2.83	4.15	5.73	7.41	9.31	8.57	6.27	3.65	2.14	-------	-------
1933	-------	-------	2.82	4.51	4.98	8.12	9.07	8.30	5.62	3.80	-------	-------	-------
1934	1.30	1.44	3.21	4.74	5.30	7.20	9.39	-------	-------	-------	-------	-------	-------
1935	-------	1.41	2.57	2.84	5.49	7.94	8.43	8.14	6.01	2.58	-------	-------	-------
1936	1.37	-------	2.91	3.44	5.46	6.27	8.40	7.34	4.29	3.19	1.86	-------	-------
1937	-------	-------	2.19	4.25	6.18	6.96	9.24	8.89	5.69	2.59	1.50	-------	-------
1938	1.29	-------	2.31	3.54	5.14	6.89	7.65	7.70	4.78	2.55	1.72	-------	-------
1939	-------	-------	3.20	5.40	6.29	7.48	8.78	7.65	4.49	2.73	1.69	1.01	-------
1940	.95	1.26	2.23	3.58	6.97	7.85	8.63	8.00	4.17	2.49	1.45	1.18	49.86
1941	1.40	1.40	2.86	4.36	4.58	5.86	7.63	6.39	4.73	3.17	1.45	-------	-------
1942	-------	-------	2.93	3.50	4.74	7.24	8.38	7.34	4.98	3.18	1.91	1.07	-------
1943	-------	1.42	2.42	3.80	5.74	6.04	7.78	7.45	5.25	2.97	1.85	1.08	-------
1944	-------	1.81	3.25	3.46	6.01	4.86	7.95	7.51	8.45	2.61	1.17	-------	-------
1945	-------	1.36	2.10	4.84	5.65	7.01	6.95	5.13	-------	-------	-------	-------	-------
Mean	1.26	1.52	2.81	4.13	5.72	7.07	8.62	7.75	5.38	3.01	1.68	1.08	50.03

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[1] Ground surrounding the evaporation station is flat, becoming rolling or hilly with some scattered timber at some distance from the station. Fall River, 175 feet wide, is 250 feet west of the station.

TABLE 128

EVAPORATION AT FALL RIVER MILLS (NEAR), SHASTA COUNTY, CALIFORNIA[1]

Station:	
Location	About two miles northwest of Fall River Mills. Lat. 41° 01′ N., Long. 121° 28′ W.
Elevation	About 3,340 feet.
Evaporation pan:	
Type	Floating pan.
Description	Diameter 4 feet, depth 8 inches, surrounded by 8 foot raft.
Authority for data	Pacific Gas and Electric Company.
Publication reference	U. S. Weather Bureau Climatological Data (41).
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1925	-------	-------	-------	-------	-------	-------	-------	10.39	5.65	3.19	1.00	0.80	-------
1926	-------	-------	4.52	5.06	7.62	12.09	14.07	12.12	8.01	3.86	-------	-------	-------
1927	-------	2.92	-------	4.98	6.55	9.06	12.38	11.28	6.96	5.56	2.00	-------	-------
1928	-------	-------	3.09	5.45	8.77	10.64	13.01	11.60	8.07	5.45	-------	-------	-------
1929	-------	-------	3.50	4.45	8.73	8.88	13.13	11.84	7.48	4.84	-------	-------	-------
1930	-------	1.15	3.42	4.58	6.68	10.37	12.58	10.75	5.99	3.38	2.52	-------	-------
1931	1.21	1.41	3.44	5.82	9.23	10.06	14.47	12.66	7.67	3.92	-------	-------	-------
1932	-------	.74	2.75	4.53	7.48	9.98	12.14	11.38	8.72	4.44	1.72	-------	-------
1933	-------	-------	2.58	5.51	5.69	9.98	12.80	11.22	7.41	5.03	-------	-------	-------
1934	.89	1.20	4.12	6.03	8.12	9.42	13.02	11.78	8.40	3.99	1.25	.75	68.98
1935	-------	-------	2.98	4.44	7.82	10.12	11.44	10.52	7.84	3.32	-------	.68	-------
1936	1.06	1.45	4.18	5.39	7.56	8.59	12.20	10.75	6.67	4.79	-------	-------	-------
1937	-------	-------	2.26	5.11	8.74	8.80	12.31	10.88	7.34	2.84	1.43	-------	-------
1938	.95	1.44	2.43	4.40	7.04	9.83	11.75	10.96	7.06	3.02	1.31	.67	60.86
1939	.80	-------	3.91	6.87	8.07	10.23	12.78	11.72	6.77	3.64	1.52	.67	-------
1940	.77	1.17	2.93	4.68	7.29	10.28	11.38	10.78	5.18	3.00	-------	-------	-------
1941	-------	1.06	3.35	4.36	5.99	7.87	11.38	8.77	6.12	3.85	1.12	-------	-------
1942	-------	-------	-------	4.29	5.85	8.93	11.07	9.90	6.18	3.88	1.24	.73	-------
1943	-------	1.30	2.62	4.74	7.13	7.62	10.71	10.23	7.37	3.56	1.30	-------	-------
1944	-------	1.34	3.58	3.62	7.35	5.79	10.39	9.78	6.51	3.49	.74	-------	-------
1945	-------	1.86	2.02	4.85	5.33	7.53	11.36	9.88	7.07	4.15	.93	.58	-------
Mean	.95	1.42	3.20	4.96	7.35	9.30	12.22	10.91	7.07	3.96	1.31	.70	63.35

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[1] This record appears to be high, especially in relation to evaporation from the U. S. Weather Bureau pan in Table 127.

TABLE 129

TEMPERATURE AT FALL RIVER MILLS (NEAR), SHASTA COUNTY, CALIFORNIA

Year	Mean temperature in ° F. (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1926	35	41	48	54	56	68	71	66	56	53	46	34	52
1927	35	38	42	46	52	62	68	64	57	50	43	32	49
1928	35	40	45	47	60	62	71	68	60	51	40	28	51
1929	33	35	42	44	56	60	67	67	59	52	41	40	50
1930	27	40	44	50	52	64	69	66	59	49	41	32	49
1931	35	39	43	50	60	62	73	69	58	51	37	30	51
1932	28	31	44	42	55	66	67	67	65	51	42	25	49
1933	24	23	41	48	49	62	72	69	58	56	42	34	48
1934	38	42	51	53	57	62	67	70	62	52	42	35	53
1935	26	36	37	47	56	64	67	69	63	49	38	34	49
1936	36	37	42	50	56	61	69	67	60	53	39	30	50
1937	17	28	38	44	56	62	70	66	60	50	40	36	47
1938	36	34	39	49	56	66	71	66	61	50	36	35	50
1939	34	30	44	52	56	60	69	69	61	50	41	38	50
1940	38	40	46	52	61	69	68	71	59	53	41	38	53
1941	38	41	46	48	57	60	71	66	58	50	44	37	51
1942	32	35	41	47	51	61	69	68	61	53	41	36	50
1943	35	39	44	50	54	58	69	63	65	50	41	35	50
1944	30	36	41	45	55	57	69	66	62	54	38	36	49
1945	35	39	39	47	54	62	71	66	61	55	40	35	50
Mean	32	36	43	48	55	62	69	67	60	52	41	34	50

TABLE 130

WIND MOVEMENT AT FALL RIVER MILLS (NEAR), SHASTA COUNTY, CALIFORNIA

Year	Total wind in miles (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1925	-------	-------	-------	-------	-------	-------	2,224	2,259	1,889	1,133	1,145	821	-------
1926	831	1,362	1,668	1,819	1,992	2,005	2,195	2,362	2,044	1,544	1,448	1,486	20,756
1927	1,447	1,867	2,055	2,275	2,088	1,843	1,914	2,062	1,878	1,427	1,244	1,371	21,471
1928	1,027	1,209	2,104	2,520	1,997	2,209	2,213	1,894	1,761	1,514	984	646	20,078
1929	1,743	1,325	1,819	2,357	2,362	2,138	2,234	2,006	1,290	1,132	796	1,430	20,632
1930	736	870	1,739	2,170	3,191	1,651	1,784	1,791	1,606	942	942	594	18,016
1931	820	914	1,956	1,972	1,977	2,299	2,154	2,066	1,997	1,508	1,050	890	19,603
1932	1,193	1,034	1,714	2,348	1,930	1,470	1,995	1,852	1,265	1,399	1,243	706	18,149
1933	815	748	1,770	1,801	2,227	1,989	1,588	1,593	1,724	1,171	655	718	16,799
1934	692	757	1,295	1,576	1,771	1,596	1,834	1,480	1,260	1,098	850	503	14,712
1935	754	697	1,614	1,757	1,449	1,152	1,561	1,130	955	1,051	572	488	13,180
1936	1,258	1,357	1,461	1,328	1,481	1,386	1,340	1,198	841	960	483	590	13,683
1937	884	405	1,137	2,429	2,383	2,072	1,810	1,731	1,499	846	1,081	767	17,044
1938	734	1,707	2,040	2,100	1,649	1,553	1,495	1,395	930	1,125	961	695	16,384
1939	1,023	1,229	1,672	1,558	1,671	1,623	1,669	1,641	1,138	720	312	418	14,674
1940	540	1,150	1,415	1,750	1,505	1,160	1,457	1,184	989	536	494	690	12,870
1941	498	554	987	1,216	1,572	1,258	1,141	1,148	902	854	511	615	11,256
1942	373	749	995	1,403	1,461	1,082	974	881	692	422	571	461	10,064
1943	645	504	926	1,243	845	1,208	1,062	1,190	710	827	292	471	9,923
1944	362	766	1,312	1,351	1,425	1,135	974	924	708	605	540	284	10,386
1945	282	1,029	1,337	1,277	1,547	1,019	970	951	833	768	945	633	11,591
Mean	833	1,012	1,551	1,812	1,826	1,592	1,647	1,559	1,281	1,028	815	728	15,684

TABLE 131

EVAPORATION AT FERN CANYON, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	On the eastern crest of San Dimas Experimental Forest. Lat. 34° 12′ N., Long. 117° 42′ W.
Elevation	5,100 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	California Forest and Range Experiment Station, San Dimas Experimental Forest.
Publication reference	None.
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1937	-------	-------	-------	-------	7.70	9.15	10.45	11.06	9.10	-------	-------	-------	-------
1938	-------	-------	-------	3.28	4.68	7.81	7.34	-------	-------	-------	-------	4.50	-------
1939	2.00	2.00	4.14	6.94	8.58	9.88	11.04	11.21	6.51	8.64	5.68	4.16	80.78
1940	1.53	1.11	4.46	5.24	8.66	10.92	11.15	11.11	7.35	-------	-------	-------	-------
1941	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
1942	3.00	3.01	4.14	2.99	6.73	9.43	12.00	10.37	9.38	6.45	4.07	3.60	75.17
1943	3.35	3.91	3.05	4.73	7.92	7.71	10.61	8.75	8.59	-------	-------	-------	-------
Mean	2.47	2.51	3.95	4.64	7.38	9.15	10.43	10.50	8.19	7.54	4.88	4.09	75.73

TABLE 132

TEMPERATURE AT FERN CANYON, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA

Year	Mean temperature in ° F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1937	28	42	44	50	60	68	77	78	73	64	55	53	58
1938	49	42	42	50	57	64	74	73	71	55	51	48	56
1939	43	38	47	56	58	66	73	75	65	58	52	53	57
1940	46	43	49	49	61	71	72	75	64	60	51	49	58
1941	43	44	46	46	59	63	72	68	63	50	52	41	54
1942	45	39	44	44	52	64	75	72	66	-------	-------	-------	-------
Mean	42	41	45	49	58	66	74	74	67	57	52	49	56

TABLE 133

WIND MOVEMENT AT FERN CANYON, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA

Year	Total wind in miles[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1937	-------	-------	-------	-------	1,900	1,715	-------	1,953	2,466	1,873	1,614	2,833	-------
1938	3,013	1,361	2,340	1,944	-------	1,905	2,038	2,226	2,025	2,040	2,733	-------	-------
1939	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	3,219	2,432	-------
1940	2,846	2,118	2,476	2,472	1,815	1,486	1,841	1,547	2,082	2,131	2,398	2,783	25,995
1941	2,921	3,550	-------	-------	2,421	1,793	2,493	2,180	1,341	2,926	3,084	2,852	-------
1942	2,899	2,840	2,932	2,793	2,784	2,471	2,442	2,561	2,618	-------	-------	-------	-------
Mean	2,920	2,467	2,583	2,403	2,230	1,874	2,204	2,093	1,906	2,242	2,610	2,725	28,257

[1] Anemometer about 7 feet above ground.

TABLE 134

EVAPORATION AT FRIANT GOVERNMENT CAMP, FRESNO COUNTY, CALIFORNIA

Station:
  Location ------------------One quarter mile north of Friant. Lat. 36° 59′ N., Long. 119° 42′ W.*
  Elevation ----------------400 feet.
Evaporation pan:
  Type ----------------------U. S. Weather Bureau pan type.[1]
  Description ---------------Diameter 4 feet, depth 12 inches, set on 2 x 4 inch timber grill.
Authority for data-------------U. S. Bureau of Reclamation, Central Valley Project.
Publication reference ---------U. S. Weather Bureau Climatological Data (41).
Meteorologic data ------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	-------	-------	-------	-------	10.85	17.42	16.22	15.50	10.90	5.30	3.67	1.83	-------
1940	-------	-------	4.63	6.24	11.68	14.87	15.59	13.64	8.47	6.21	2.51	2.45	-------
1941	1.31	1.58	3.42	4.99	9.91	12.03	14.62	12.19	9.40	5.43	2.38	1.05	78.31
1942	1.06	1.88	3.66	4.51	9.15	14.59	17.06	14.64	9.73	6.75	2.26	.84	86.13
1943	1.15	1.83	2.80	5.08	11.45	12.54	15.20	12.94	9.35	6.17	3.07	1.53	83.11
1944	1.45	2.11	3.80	5.17	9.96	12.26	16.23	13.75	10.01	5.91	1.75	.81	83.21
1945	.77	1.47	2.72	6.18	9.16	13.53	17.16	13.65	9.30	5.01	2.13	.82	81.90
Mean	1.15	1.77	3.50	5.36	10.31	13.89	16.01	13.76	9.59	5.82	2.54	1.33	85.03

* Instruments are exposed in gently rolling lower foothill country on the eastern edge of San Joaquin Valley.

[1] This pan is reported as 12 inches in depth instead of the usual 10 inches and to be filled with water to a depth of 11 inches.

TABLE 135

TEMPERATURE AT FRIANT GOVERNMENT CAMP, FRESNO COUNTY, CALIFORNIA

Year	Mean temperature in ° F. (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1942	47	48	54	58	64	74	84	81	73	67	55	47	63
1943	47	53	56	61	69	70	81	76	76	65	56	48	63
1944	47	47	52	55	68	71	80	78	75	67	51	48	62
1945	44	51	49	59	65	75	84	79	76	67	53	-------	-------
Mean	46	50	53	58	66	72	82	78	75	66	54	48	62

TABLE 136

WIND MOVEMENT AT FRIANT GOVERNMENT CAMP, FRESNO COUNTY, CALIFORNIA

Year	Total wind in miles (41)[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	-------	-------	-------	-------	-------	1,973	1,881	1,650	1,567	1,290	1,243	1,395	-------
1940	1,988	1,881	1,689	1,417	1,572	1,691	1,727	1,366	1,199	1,127	1,102	1,649	18,408
1941	1,451	1,775	1,543	1,363	1,705	1,767	1,548	1,575	1,295	1,168	879	1,602	17,671
1942	1,179	1,359	1,460	1,458	1,817	2,245	2,012	1,626	1,387	1,348	1,366	1,244	18,501
1943	1,919	1,237	1,372	1,335	1,782	2,102	1,882	1,523	953	1,115	796	1,148	17,164
1944	1,252	1,818	1,498	1,325	1,624	2,191	1,966	1,515	1,137	895	1,154	841	17,216
1945	864	1,486	1,554	1,145	1,467	1,545	1,381	1,125	760	888	775	1,198	14,188
Mean	1,442	1,593	1,519	1,340	1,661	1,930	1,771	1,483	1,185	1,119	1,045	1,297	17,385

[1] Anemometer cups placed 12 inches higher than rim of pan.

TABLE 137

EVAPORATION AT FULLERTON EVAPORATION STATION, ORANGE COUNTY, CALIFORNIA

Station:	
Location	At Airport 3 miles west of Fullerton. Lat. 33° 52′ N., Long. 117° 59′ W.*
Elevation	92 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	Div. of Irrig., SCS, U. S. Dept. of Agric. and Orange County Flood Control District.
Publication reference	Evaporation Investigations in Southern California (49).
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935	2.62	3.30	3.52	5.05	6.68	7.46	9.61	8.60	6.66	5.98	3.52	3.25	66.25
1936	3.16	2.82	4.57	5.05	8.36	9.20	9.73	9.12	7.10	5.00	5.67	2.63	72.41
1937	2.07	3.10	4.57	6.28	6.18	8.29	8.96	8.52	7.93	5.21	2.78	2.94	66.83
1938	3.64	2.59	4.66	5.38	7.17	7.01	8.82	9.00	7.47	5.21	5.48	2.97	69.40
1939	2.34	3.73	3.51	5.60	7.14	8.52	9.04	8.24	[1]8.16	6.11	3.28	2.34	68.01
1940	2.81	3.18	4.63	5.77	7.27	7.17	10.13	7.72	6.99	6.33	4.28	3.67	69.95
1941	1.79	2.11	3.25	4.17	6.65	6.97	7.50	6.45	7.51	5.00	4.30	1.14	56.84
1942	2.81	3.09	4.92	4.92	7.73	6.85	8.77	7.48	6.23	5.44	3.56	3.14	64.94
1943	1.81	3.43	3.22	5.74	8.22	8.39	8.29	8.17	5.94	5.02	4.85	3.07	66.15
1944	2.70	3.20	5.02	5.57	6.32	6.73	6.72	8.02	5.47	3.58	2.60	3.08	59.01
1945	2.10	2.41	3.94	5.97	7.84	6.38	8.04	8.14	7.40	5.07	3.74	[2]2.75	63.78
Mean	2.53	3.00	4.16	5.41	7.23	7.54	8.69	8.13	6.99	5.27	4.00	2.82	65.77

* Location in open level field free from wind obstructions, Coastal climate.

[1] For 27 days.

[2] Partly estimated.

TABLE 138

EVAPORATION AT FULLERTON EVAPORATION STATION, ORANGE COUNTY, CALIFORNIA

Station:
Location ------------------At Airport 3 miles west of Fullerton. Lat. 33° 52′ N., Long. 117° 59′ W.*
Elevation ------------------92 feet.
Evaporation pan:
Type ---------------------Ground pan.
Description ---------------Diameter 12 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data-------------Div. of Irrig., SCS, U. S. Dept. of Agric. and Orange County Flood Control District.
Publication reference ---------Evaporation Investigations in Southern California (49).
Meteorologic data ------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935	1.64	2.29	2.68	3.95	5.28	6.31	7.45	6.82	5.32	4.64	2.50	2.17	51.05
1936	2.03	2.07	3.51	4.01	6.66	7.43	7.73	7.20	5.63	3.73	3.83	1.49	55.32
1937	1.34	2.35	3.36	4.93	5.05	6.56	7.27	7.04	6.16	3.87	2.09	2.11	52.13
1938	2.36	1.73	3.51	4.25	5.61	5.99	7.15	7.09	5.80	4.09	3.95	1.92	53.45
1939	1.54	2.64	2.80	4.56	5.94	6.96	7.50	6.66	5.81	4.53	2.50	1.72	53.16
1940	1.67	2.00	3.55	4.50	6.18	6.00	7.85	6.05	5.56	4.51	3.17	2.90	53.94
1941	1.32	1.82	3.36	3.27	6.34	5.19	6.36	4.95	[1]5.41	3.70	2.64	1.25	45.61
1942	2.27	2.19	3.60	3.74	6.19	5.54	7.44	6.40	5.10	4.31	2.62	2.12	51.52
1943	3.03	2.46	2.33	4.12	5.37	6.57	6.44	6.34	4.84	3.64	3.23	1.94	50.31
1944	1.72	2.19	3.62	4.56	5.22	5.47	6.04	6.55	4.48	-------	-------	-------	-------
Mean	1.89	2.17	3.23	4.19	5.78	6.20	7.12	6.51	5.41	4.11	2.95	1.96	51.52

* Location in open level field free from wind obstruction, Coastal climate.

[1] Average of September for all years of record.

TABLE 139

EVAPORATION AT FULLERTON EVAPORATION STATION, ORANGE COUNTY, CALIFORNIA

Station:
  Location ---------- At Airport 3 miles west of Fullerton. Lat. 33° 52′ N., Long. 117° 59′ W.*
  Elevation ---------- 92 feet.
Evaporation pans:
  Type ---------- Ground pans.
  Description ---------- (1) Diameter 6 feet, depth 3 feet, set in ground 2.75 feet.
    (2) Bureau of Plant Industry pan, diameter 6 feet, depth 2 feet, set in ground 20 inches.
Authority for data ---------- Div. of Irrig., SCS, U. S. Dept. of Agric.
Publication reference ---------- Evaporation Investigations in Southern California (49).
Meteorologic data ---------- Temperature, wind.

Month	Pan diameter 6 feet, depth 3 feet, set in ground 2.75 feet						Bureau of Plant Industry pan diameter 6 feet, depth 2 feet, set in ground 20 inches			
	1935	1936	1937	1938	1939	Mean	1937	1938	1939	Mean
	Evaporation in inches									
January	2.15	2.34	1.54	2.70	1.80	2.11	--------	2.58	1.67	2.13
February	2.69	2.20	[1]2.43	1.89	2.94	2.43	--------	1.85	2.75	2.30
March	2.94	3.76	3.69	3.78	2.94	3.42	--------	3.72	2.90	3.31
April	4.26	4.22	5.37	4.50	4.83	4.63	5.07	4.54	4.89	4.83
May	5.63	7.22	5.42	5.99	6.52	6.16	5.17	5.96	6.21	5.78
June	6.68	7.99	7.06	6.50	7.61	7.17	6.87	6.39	7.56	6.94
July	8.00	8.22	7.92	7.79	8.08	8.00	7.60	7.65	8.02	7.76
August	7.33	7.79	7.65	7.95	7.39	7.62	7.35	7.65	7.06	7.35
September	5.75	6.09	6.73	6.60	6.49	6.33	6.43	6.20	6.35	6.33
October	5.14	4.15	4.44	4.70	5.02	4.69	4.16	4.28	4.92	4.45
November	2.89	4.40	2.43	4.58	2.73	3.41	2.22	4.14	2.63	3.00
December	2.50	1.70	2.41	2.18	1.90	2.14	2.25	1.98	1.86	2.03
Annual	55.96	60.08	57.09	59.16	58.25	58.11	--------	56.94	56.82	56.20

* Location in open level field free from wind obstruction, Coastal climate.

[1] Estimated.

TABLE 140

EVAPORATION AT FULLERTON EVAPORATION STATION, ORANGE COUNTY, CALIFORNIA

Station:
  Location ---------- At Airport 3 miles west of Fullerton. Lat. 33° 52′ N., Long. 117° 59′ W.*
  Elevation ---------- 92 feet.
Evaporation pans:
  Type ---------- Ground pans.
  Description ---------- (1) Diameter 4 feet, depth 3 feet, set in ground 2.75 feet.
    (2) Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data ---------- Div. of Irrig., SCS, U. S. Dept. of Agric. and Orange County Flood Control District.
Publication reference ---------- Evaporation Investigations in Southern California (49).
Meteorologic data ---------- Temperature, wind.

Month	Pan diameter 4 feet, depth 3 feet, set in ground 2.75 feet			Pan diameter 2 feet, depth 3 feet, set in ground 2.75 feet					
	1938	1939	Mean	1935	1936	1937	1938	1939	Mean
	Evaporation in inches								
January	2.80	1.82	2.31	2.35	2.84	1.81	3.18	2.11	2.46
February	1.90	2.93	2.42	2.98	2.42	[1]2.72	2.16	3.30	2.72
March	3.58	2.92	3.25	3.13	4.23	4.05	4.08	3.33	3.76
April	4.56	4.91	4.74	4.50	4.53	5.94	4.98	5.46	5.08
May	6.09	6.44	6.26	6.15	7.96	6.06	6.68	7.28	6.83
June	6.56	7.66	7.11	7.37	8.67	7.88	7.22	8.59	7.95
July	7.89	8.19	8.04	9.07	9.31	8.75	8.72	9.02	8.97
August	8.06	7.40	7.73	8.44	8.84	8.53	8.97	8.30	8.62
September	6.74	6.63	6.68	6.70	6.76	7.88	7.17	7.64	7.23
October	4.76	5.20	4.98	5.93	4.64	5.23	5.38	5.99	5.43
November	4.74	2.94	3.84	3.38	4.94	2.92	5.36	3.40	4.00
December	2.37	2.02	2.20	3.04	2.18	2.81	2.74	2.37	2.63
Annual	60.05	59.06	59.56	63.04	67.32	64.58	66.64	66.79	65.68

* Location in open level field free from wind obstruction, Coastal climate.

[1] Estimated.

TABLE 141

EVAPORATION AT FULLERTON EVAPORATION STATION, ORANGE COUNTY, CALIFORNIA

Station:	
Location	At Airport 3 miles west of Fullerton. Lat. 33° 52′ N., Long. 117° 59′ W.*
Elevation	92 feet.
Evaporation pans:	
Type	Ground pans.
Description	(1) Screened pan, diameter 2 feet, depth 3 feet, set in ground 2.75 feet. (2) Square pan 3 x 3 feet, 18 inches deep, set in ground 14 inches.
Authority for data	Div. of Irrig., SCS, U. S. Dept. of Agric. and Orange County Flood Control District.
Publication reference	Evaporation Investigations in Southern California (49).
Meteorologic data	Temperature, wind.

Month	Screened pan, diameter 2 feet, depth 3 feet, set in ground 2.75 feet[1]					Square pan, 3 x 3 feet, depth 18 inches, set 14 inches in ground					
	1936	1937	1938	1939	Mean	1935	1936	1937	1938	1939	Mean
	Evaporation in inches										
January	[2]2.15	1.34	2.91	1.78	2.04	1.96	2.42	1.41	2.77	1.72	2.06
February	[2]2.75	[2]2.18	1.86	2.81	2.40	2.57	2.22	[2]2.44	1.89	3.09	2.44
March	3.46	3.36	3.31	2.79	3.23	2.95	3.83	3.62	3.61	2.97	3.40
April	3.84	4.93	4.19	4.55	4.38	4.32	4.43	5.52	4.60	5.02	4.78
May	6.61	5.05	5.64	5.86	5.79	5.83	7.42	5.57	6.26	6.64	6.34
June	7.13	6.56	6.01	7.18	6.72	7.02	8.28	7.47	6.74	8.14	7.53
July	7.55	7.27	7.22	7.49	7.38	9.05	8.48	8.22	8.17	8.47	8.48
August	6.92	7.04	7.39	6.88	7.06	7.87	7.78	7.83	8.04	7.37	7.78
September	5.29	6.16	6.15	6.36	5.99	6.07	6.00	6.95	6.27	6.91	6.44
October	4.14	3.87	4.40	4.81	4.30	5.27	4.09	4.50	4.45	4.94	4.65
November	4.52	2.09	4.59	2.77	3.49	2.90	4.35	2.45	4.54	2.63	3.37
December	1.77	2.11	2.23	1.89	2.00	2.58	1.76	2.37	2.23	1.77	2.14
Annual	56.13	51.96	55.90	55.17	54.80	58.39	61.06	58.35	59.57	59.67	59.41

* Location in open level field free from wind obstruction, Coastal climate.

[1] Screen of ¼-inch galvanized hardware cloth.

[2] Estimated.

TABLE 142

TEMPERATURE AT FULLERTON EVAPORATION STATION, ORANGE COUNTY, CALIFORNIA

Year	Mean temperature in °F (49)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935	52	56	52	58	61	67	70	74	70	63	56	54	61
1936	53	54	56	59	64	68	74	72	68	64	60	52	62
1937	44	52	53	60	63	67	70	70	71	64	56	56	60
1938	53	52	53	58	63	64	68	72	71	62	55	56	61
1939	51	48	52	58	60	64	69	72	74	67	60	57	61
1940	54	56	58	62	66	67	70	70	68	61	59	57	62
1941	54	57	59	60	59	65	70	70	66	60	60	53	61
1942	54	50	55	58	63	65	71	71	66	67	58	53	61
1943	[1]54	[1]57	[1]58	[1]60	[1]65	62	66	68	68	66	58	54	61
1944	52	51	54	56	62	61	66	70	68	63	56	54	59
1945	51	53	51	56	61	64	70	73	71	66	57	53	60
Mean	52	53	55	59	62	65	69	71	69	64	58	54	61

[1] January to May temperatures are from Santa Ana records.

TABLE 143

WIND MOVEMENT AT FULLERTON EVAPORATION STATION, ORANGE COUNTY, CALIFORNIA

Year	Total wind in miles (49)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935	1,639	1,697	1,516	2,137	2,090	2,122	2,281	1,792	1,770	2,056	1,466	1,713	22,279
1936	1,627	1,929	1,863	1,790	2,411	2,375	2,149	2,096	1,773	1,937	2,107	2,051	24,108
1937	2,386	1,995	2,381	1,912	1,900	2,089	1,996	2,202	2,125	1,860	1,563	1,861	24,270
1938	1,986	2,460	2,382	1,699	1,962	2,030	2,054	1,870	1,580	1,481	-------	1,960	-------
1939	1,935	2,492	1,989	1,825	1,942	2,227	-------	-------	-------	-------	-------	-------	-------
Mean	1,915	2,115	2,026	1,873	2,061	2,169	2,120	1,990	1,812	1,834	1,712	1,896	23,523

TABLE 144

EVAPORATION AT GIBRALTAR RESERVOIR, SANTA BARBARA COUNTY, CALIFORNIA

Station:
Location ------------------ At Gibraltar Reservoir on Santa Ynez River 7 to 8 miles north of Santa Barbara. Lat. 34° 31′ N., Long. 119° 37′ W.
Elevation ------------------ Approx. 1,210 feet.
Evaporation pan:
Type ------------------ U. S. Weather Bureau pan.
Description ------------------ Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data ------------ Santa Barbara Water Department.
Publication reference --------- None.
Meteorologic data ------------ Temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	-------	-------	-------	4.96	2.64	1.07	-------
1932	1.46	1.90	5.25	6.49	7.14	8.81	10.19	9.77	7.23	5.18	3.74	1.49	68.65
1933	1.46	2.80	4.62	5.24	7.18	7.28	10.89	9.48	7.15	5.72	3.37	1.36	66.55
1934	1.57	1.50	4.90	6.66	8.40	7.13	10.34	9.92	7.78	4.74	2.39	1.23	66.56
1935	1.30	2.20	3.09	4.18	5.71	8.90	9.39	9.00	7.61	5.26	2.36	1.49	60.49
1936	1.75	1.60	4.46	5.80	7.91	9.05	10.26	9.25	8.14	4.55	2.64	1.52	66.53
1937	.87	1.77	3.31	6.07	6.64	8.55	10.13	9.78	7.43	5.49	2.61	1.31	63.96
1938	1.32	1.19	2.78	4.86	6.55	6.98	9.60	8.86	7.47	4.43	2.77	1.28	58.09
1939	.84	2.01	3.27	5.83	6.26	8.36	9.40	9.22	7.05	5.39	2.96	1.50	62.09
1940	1.11	1.56	4.08	4.99	7.12	8.64	9.99	9.52	7.23	5.40	2.84	1.48	63.96
1941	.96	1.05	2.66	3.89	6.24	7.58	8.71	7.70	6.66	4.42	2.78	.76	53.41
1942	1.18	2.15	3.91	3.60	6.48	7.87	9.44	8.76	6.81	4.94	2.20	1.60	58.94
1943	1.37	2.06	3.11	4.17	7.10	7.47	8.84	8.71	7.91	5.73	3.51	1.45	61.43
1944	1.57	1.84	3.89	4.79	6.01	6.59	8.34	9.15	7.17	-------	-------	-------	-------
Mean	1.29	1.82	3.79	5.12	6.83	7.94	9.66	9.16	7.36	5.09	2.83	1.32	62.21

TABLE 145

TEMPERATURE AT GIBRALTAR RESERVOIR, SANTA BARBARA COUNTY, CALIFORNIA[1]

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	------	------	------	------	------	------	------	------	------	64	54	49	------
1932	47	52	58	58	64	69	73	72	70	68	63	58	63
1933	48	51	57	58	60	67	75	75	67	68	60	53	62
1934	53	54	63	64	68	66	75	75	75	65	58	50	64
1935	51	54	51	59	61	69	73	76	71	63	53	52	61
1936	54	52	57	60	66	72	79	77	71	64	58	50	63
1937	40	51	53	58	64	70	76	76	71	66	57	53	61
1938	52	51	51	58	63	67	75	75	73	63	54	54	61
1939	49	45	53	61	62	68	73	74	72	63	58	54	61
1940	53	53	57	60	65	70	74	73	67	65	57	56	62
1941	52	55	55	56	65	66	74	71	67	61	55	51	61
1942	52	50	55	56	61	66	75	73	66	64	58	53	61
1943	51	54	56	58	64	65	72	71	72	68	60	55	62
1944	50	54	54	58	63	72	72	76	73	------	------	------	64
Mean	50	52	55	59	64	68	74	74	70	65	57	53	62

[1] Records by Santa Barbara Water Dept.

TABLE 146

EVAPORATION AT GRANT LAKE, MONO COUNTY, CALIFORNIA

Station:	
Location	On Rush Creek, tributary to Mono Lake. Lat. 37° 50′ N., Long. 119° 06′ W.
Elevation	Approx. 7,130 feet.
Evaporation pan:	
Type	Floating pan.
Description	Square, 3 x 3 feet, depth 18 inches.
Authority for data	Los Angeles Dept. of Water and Power.
Publication reference	None.
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	May to Nov. Incl.
1941	------	------	------	------	------	------	------	6.77	6.24	5.88	4.46	------	------
1942	------	------	------	6.94	5.89	7.67	10.39	7.30	6.55	4.89	4.50	------	47.19
1943	------	------	------	5.50	5.74	6.93	6.87	9.25	7.29	7.54	4.10	------	47.72
1944	------	------	------	------	7.29	6.40	8.38	9.19	7.69	5.40	2.81	------	47.16
Mean	------	------	------	6.12	6.31	7.00	8.55	8.13	6.94	5.93	3.97	------	46.83

TABLE 147

EVAPORATION AT HAYFIELD WEATHER AND EVAPORATION STATION, RIVERSIDE COUNTY, CALIFORNIA

Station:
  Location ------------------- About 16 miles west of Desert Center near the Colorado River Aqueduct of the Metropolitan Water District of Southern California. Lat. 33° 42′ N., Long. 115° 38′ W.
  Elevation ------------------ Prior to February, 1939, elevation was 1,460 feet, thereafter 1,370 feet.
Evaporation pan:
  Type ----------------------- U. S. Weather Bureau pan.
  Description ---------------- Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data------------ Metropolitan Water District of Southern California.
Publication reference -------- None.
Meteorologic data ------------ Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	-------	-------	-------	-------	18.10	16.82	18.94	16.23	15.10	11.33	7.22	4.88	-------
1935	4.04	5.14	8.98	11.81	15.13	19.88	19.22	15.36	13.65	10.69	6.41	4.48	134.79
1936	5.39	5.67	10.85	14.33	17.06	19.50	19.50	17.02	14.31	10.47	6.45	4.12	144.67
1937	3.09	6.32	8.20	12.63	16.19	18.53	18.48	18.27	14.47	11.01	6.62	5.36	139.17
1938	5.59	5.91	7.83	13.26	15.84	18.46	19.14	16.90	14.18	10.72	8.64	5.58	142.05
1939	5.29	5.96	10.14	14.12	16.00	18.88	18.21	15.60	14.75	11.16	6.02	4.60	140.73
1940	4.08	5.72	10.34	13.30	17.86	19.12	19.74	18.37	12.92	10.40	7.55	4.38	143.78
1941	3.13	4.38	7.51	10.30	16.58	17.47	19.09	16.62	14.18	9.40	7.24	4.97	130.87
Mean	4.37	5.58	9.12	12.82	16.60	18.58	19.04	16.80	14.20	10.65	7.02	4.80	139.58
	Pan moved to 22 miles west of Desert Center, exposures practically identical												
1942	6.44	5.92	10.25	11.81	17.63	19.74	22.35	19.15	16.10	12.06	8.83	5.90	156.18
1943	6.16	7.12	10.53	12.74	19.20	19.32	21.82	17.53	16.63	11.66	9.22	4.41	156.34
1944	6.82	4.56	10.60	13.28	16.70	18.56	21.38	20.26	16.59	11.52	5.66	5.07	151.00
1945	5.08	[1]8.29	[1]8.60	14.73	18.62	19.42	20.40	14.90	15.78	11.80	8.32	4.46	150.40
Mean	6.12	6.47	10.00	13.14	18.04	19.26	21.49	17.96	16.28	11.76	8.01	4.96	153.49

[1] Pan out of operation February 13 to March 6, inclusive, and record estimated for this period. Temporary sheds or small building in the vicinity of the evaporation pan were removed early in 1942 resulting in an increase in evaporation of 14 inches annually apparently because of greater wind movement over the water surface.

TABLE 148

TEMPERATURE AT HAYFIELD WEATHER AND EVAPORATION STATION, RIVERSIDE COUNTY, CALIFORNIA[1]

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	57	61	73	75	81	81	92	91	83	75	63	56	74
1935	52	58	58	68	72	87	90	89	85	71	58	54	70
1936	54	56	65	71	79	87	91	90	82	74	62	52	72
1937	40	54	60	68	78	84	92	93	87	75	63	58	71
1938	56	54	57	67	76	83	90	88	84	70	56	56	70
1939	52	50	62	71	77	84	91	92	81	73	64	57	71
1940	55	56	65	71	80	87	88	90	81	72	58	54	71
1941	51	56	59	62	75	78	86	83	73	65	62	53	67
1942	55	52	59	66	73	82	92	88	79	72	64	55	70
1943	53	58	64	70	78	80	90	87	84	70	59	52	70
1944	50	50	59	64	73	77	86	88	82	71	56	52	67
1945	53	56	54	65	73	81	90	87	82	72	59	50	68
Mean	52	55	61	68	76	82	90	89	82	72	60	54	70

[1] Station is located in a typical desert area. Records by the Metropolitan Water District of Southern California.

TABLE 149

WIND MOVEMENT AT HAYFIELD WEATHER AND EVAPORATION STATION, RIVERSIDE COUNTY, CALIFORNIA

Year	Mean wind in miles per hour[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	-------	-------	-------	-------	3.27	3.62	3.31	2.82	2.65	2.84	2.66	2.63	------
1935	2.51	2.98	3.20	3.27	3.41	2.84	2.83	2.82	2.46	2.70	2.63	2.31	2.83
1936	2.51	3.11	3.32	3.38	3.14	3.05	3.07	2.31	2.42	1.99	1.90	1.83	2.69
1937	2.72	2.32	2.86	3.25	3.37	3.23	3.20	2.92	2.47	2.17	1.74	2.25	2.73
1938	2.09	3.08	3.71	4.08	3.41	3.11	2.90	2.88	2.08	3.99	3.98	2.97	3.19
1939	3.64	3.94	3.59	3.69	3.14	3.16	2.70	2.19	3.07	4.13	1.92	1.85	3.08
1940	2.11	3.73	4.15	4.74	3.72	3.23	3.33	3.04	2.94	2.73	3.43	2.42	3.29
1941	2.67	2.83	3.13	4.49	3.98	3.56	3.20	2.81	3.07	3.68	3.32	3.19	3.33
Mean	2.61	3.14	3.42	3.84	3.43	3.22	3.07	2.72	2.64	3.03	2.70	2.43	3.02
	Evaporation station moved to 22 miles west of Desert Center												
1942	4.31	3.67	4.32	4.68	4.74	3.98	3.70	3.71	2.84	3.27	2.81	2.61	3.73
1943	3.59	4.29	4.44	4.00	4.34	4.29	3.29	2.80	2.65	2.78	2.99	2.96	3.53
1944	4.03	3.51	2.97	4.33	3.52	4.21	2.69	2.82	3.00	2.58	3.57	2.49	3.30
1945	2.63	4.20	4.29	4.51	4.21	3.40	2.74	2.32	3.08	2.54	3.57	2.28	3.30
Mean	3.64	3.92	4.00	4.38	4.20	3.97	3.10	2.91	2.89	2.79	3.24	2.58	3.47

[1] Anemometer cups about 6 inches above top of evaporation pan. Temporary sheds or small buildings in the vicinity of the evaporation pan were moved in 1942 resulting in greater wind movement over the water surface.

TABLE 150

EVAPORATION AT HENSHAW RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ------------------ On San Luis Rey River. Lat. 33° 14′ N., Long. 116° 46′ W.
  Elevation ------------------ 2,700 feet.
Evaporation pan:
  Type ------------------ U. S. Weather Bureau pan.
  Description ------------------ Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data------------ San Diego County Water Co.
Publication reference --------- Utilization of the Waters of Lower San Luis Rey Valley, San Diego County, Calif. (32).
Meteorologic data ------------ None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1941	-------	-------	-------	-------	6.36	7.70	9.75	8.02	6.66	3.64	2.80	1.61	-------
1942	2.22	1.83	4.06	4.14	7.62	8.75	11.77	10.35	7.82	4.66	3.23	2.18	68.63
1943	2.21	2.76	3.64	4.19	7.47	7.76	9.44	10.17	8.75	4.47	3.66	1.27	65.79
Mean	2.22	2.30	3.85	4.16	7.15	8.07	10.32	9.51	7.74	4.26	3.23	1.69	64.50

TABLE 151

EVAPORATION AT HENSHAW RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA[1]

Station:
  Location ------------------On San Luis Rey River. Lat. 33° 14′ N., Long. 116° 46′ W.
  Elevation ------------------2,700 feet.
Evaporation pan:
  Type ----------------------Floating pan.
  Description ----------------Square, 3 x 3 feet, depth 18 inches.
Authority for data-------------San Diego County Water Co.
Publication reference ----------None.
Meteorologic data -------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1923---	2.80	2.69	3.60	3.85	6.82	7.99	9.64	8.88	6.08	5.76	2.33	2.22	62.66
1924---	2.09	2.74	3.58	3.41	8.58	9.74	10.10	-------	8.00	-------	-------	-------	-------
1925---	-------	-------	-------	-------	-------	-------	9.84	8.99	6.92	-------	-------	-------	-------
1926---	-------	-------	-------	-------	7.02	8.12	10.28	10.14	-------	-------	-------	-------	-------
1927---	-------	-------	-------	4.45	6.82	6.94	9.86	9.76	7.76	-------	-------	-------	-------
1928---	-------	-------	-------	-------	-------	8.56	10.62	9.66	8.48	5.69	-------	-------	-------
1929---	-------	-------	-------	-------	-------	7.30	8.94	-------	7.74	-------	-------	-------	-------
1930---	-------	-------	-------	-------	-------	7.42	10.22	9.60	8.40	-------	-------	3.00	-------
1931---	-------	-------	-------	4.90	7.35	8.72	10.40	9.75	8.52	5.81	-------	-------	-------
1932---	-------	-------	-------	5.46	6.85	8.45	10.88	11.06	8.50	5.24	4.98	1.60	-------
1933---	-------	-------	-------	4.32	6.52	8.88	10.10	10.10	8.82	6.94	3.87	3.23	-------
1934---	2.72	2.52	5.24	6.70	9.04	-------	10.66	10.38	8.46	5.36	4.07	3.72	-------
1935---	-------	-------	-------	4.47	6.14	9.34	11.86	11.05	9.58	6.73	4.54	-------	-------
1936---	-------	1.19	4.13	5.30	8.47	9.48	10.94	10.14	8.36	-------	-------	-------	-------
1937---	1.42	1.50	2.48	4.81	-------	8.70	10.43	11.02	9.70	6.78	4.23	3.20	-------
1938---	3.54	1.56	-------	4.81	5.61	8.02	-------	9.53	8.50	6.48	6.00	-------	-------
1939---	-------	-------	-------	-------	-------	9.52	10.36	10.74	7.83	5.94	3.46	2.41	-------
1940---	1.91	-------	3.44	-------	-------	8.94	10.42	10.44	7.77	6.61	4.84	-------	-------
1941---	-------	-------	-------	-------	-------	8.21	9.68	9.75	8.10	5.24	3.58	1.80	-----
1942---	1.71	-------	-------	-------	-------	9.00	12.28	10.73	7.36	5.83	3.45	2.86	-------
1943---	3.26	-------	-------	-------	7.92	8.16	8.96	9.04	-------	6.02	4.65	-------	-------
1944---	-------	-------	-------	-------	-------	8.01	10.52	11.02	8.20	6.90	2.29	2.79	-------
1945---	-------	-------	-------	4.24	7.42	7.92	10.77	9.09	8.41	-------	4.90	-------	-------
Mean--	2.43	2.03	3.74	4.73	7.27	8.45	10.35	10.04	8.17	6.09	4.08	2.68	70.06

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[1] Many records are missing principally because of swamping of the floating pan during winds. This record extends back to February, 1913, but the earlier records are considered questionable.

TABLE 152

EVAPORATION AT HENSHAW RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
Location ---------------- On San Luis Rey River. Lat. 33° 14′ N., Long. 116° 46′ W.
Elevation ---------------- 2,700 feet.
Evaporation pan:
Type ---------------- Ground pan.
Description ---------------- Square, 3 x 3 feet, depth 18 inches, set in ground 15 inches.
Authority for data ---------------- San Diego County Water Co.
Publication reference ---------------- None.
Meteorologic data ---------------- None.

Year*	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1922	-------	-------	-------	-------	-------	8.61	9.44	10.30	8.44	6.48	3.42	2.11	-------
1923	3.36	3.23	5.59	4.12	8.17	8.80	10.20	9.62	5.99	5.27	3.00	2.32	69.67
1924	2.26	3.44	3.29	3.58	7.20	9.66	10.56	9.56	8.19	5.24	3.27	2.28	68.53
1925	2.12	2.54	4.09	4.95	7.20	7.34	10.70	9.88	7.38	2.87	1.85	1.94	62.86
1926	2.14	2.26	3.25	5.74	6.68	8.14	10.56	9.36	7.46	5.66	3.72	1.90	66.87
1927	1.67	1.89	3.56	4.43	6.68	8.16	10.50	9.76	7.62	5.22	2.64	2.08	64.21
1928	1.46	2.32	3.63	5.33	6.76	8.94	10.44	9.98	8.58	5.07	3.04	2.27	67.82
1929	2.39	2.51	2.07	3.83	6.92	7.62	11.34	9.56	6.52	5.26	5.40	3.24	66.66
1930	3.26	2.51	2.84	4.40	4.92	7.56	8.48	9.04	7.58	5.67	3.96	2.30	62.52
1931	2.62	1.92	3.93	5.00	6.29	7.98	10.70	9.77	7.00	4.32	3.69	2.22	65.44
1932	1.45	1.90	3.64	5.48	6.32	6.90	8.02	9.70	7.18	4.78	3.68	1.00	60.05
1933	.84	2.13	3.68	3.16	5.26	8.02	9.56	8.12	6.54	5.14	3.03	1.39	56.87
1934	1.96	1.64	4.16	4.98	6.92	6.92	9.28	9.12	6.84	4.12	2.14	2.20	60.28
1935	1.31	2.12	2.57	3.03	4.40	7.16	8.34	9.22	6.70	5.02	2.68	1.86	54.41
1936	2.18	.59	4.20	4.35	7.83	8.96	8.90	7.71	6.88	7.09	5.17	1.30	65.16
1937	1.87	1.96	2.80	4.88	6.76	9.30	9.78	10.50	8.32	5.44	2.95	2.52	67.08
1938	2.50	1.25	2.58	4.84	5.78	8.74	10.48	9.37	7.60	6.48	4.08	1.92	65.62
1939	1.95	2.41	3.38	4.44	7.46	9.52	10.32	10.24	4.97	4.62	2.29	1.73	63.33
1940	1.37	3.01	3.74	4.07	8.40	9.68	11.60	10.72	7.63	5.03	3.17	1.86	70.28
1941	1.03	1.12	2.25	3.29	6.66	8.31	[1]9.68	7.86	6.54	3.89	2.46	1.64	54.73
1942	1.88	1.30	3.51	3.05	6.90	8.30	11.16	10.25	7.42	4.98	3.35	1.82	63.92
1943	3.26	2.22	[1]2.25	3.76	7.64	7.93	9.74	9.90	8.06	4.00	3.66	1.17	63.59
1944	1.59	.87	3.46	3.30	7.16	7.87	9.84	10.10	7.70	5.52	1.82	2.79	62.02
1945	1.65	1.45	1.73	4.90	-------	-------	-------	-------	-------	-------	-------	-------	-------
Mean	2.00	2.03	3.31	4.30	6.74	8.28	9.98	9.55	7.27	5.09	3.24	1.99	63.77

* This record extends back to June, 1917, but prior to May, 1922, the pan was covered with a fine mesh screen which reduced the evaporation to a mean annual loss of 46.10 inches as compared with a mean evaporation loss of 63.77 inches after the screen was removed.

[1] Partly estimated.

TABLE 153

EVAPORATION AT HUNTINGTON BEACH, ORANGE COUNTY, CALIFORNIA

Station:	
Location	Four miles northwest of Huntington Beach. Lat. 33° 43′ N., Long. 118° 02′ W.
Elevation	15 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	Orange County Flood Control District.
Publication reference	None.
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	-------	-------	-------	-------	-------	-------	-------	-------	6.74	4.20	2.08	1.56	-------
1935	1.64	2.20	2.89	4.42	6.68	7.31	8.23	7.60	6.91	6.75	3.49	2.78	60.90
1936	2.80	2.35	4.80	5.29	8.29	8.89	9.91	7.72	6.23	4.85	-------	2.47	-------
1937	1.46	3.57	3.24	5.49	6.51	7.85	8.47	7.61	6.43	4.50	2.30	2.30	59.73
1938	3.09	2.18	3.20	4.94	6.78	6.69	7.76	7.55	6.22	4.63	4.83	2.00	59.87
1939	1.86	3.16	2.99	4.88	6.52	7.33	7.91	7.03	7.95	4.99	2.91	2.19	59.72
1940	-------	2.69	4.53	6.14	7.18	6.50	7.92	7.19	5.93	4.76	3.15	2.17	-------
1941	1.50	1.70	3.51	3.52	7.17	6.57	7.19	6.63	5.84	4.28	2.76	1.66	52.33
1942	2.75	2.29	4.44	4.25	7.03	9.19	7.57	6.72	6.47	4.37	2.93	1.88	59.89
1943	1.98	3.17	2.83	3.97	5.68	7.08	7.07	7.20	5.14	3.84	3.16	1.75	52.87
1944	1.53	1.42	4.40	4.80	5.62	6.44	6.42	6.48	4.69	2.89	4.83	1.79	51.31
1945	1.00	[1]2.27	[1]4.53	4.19	5.88	5.39	6.95	6.88	6.53	4.30	2.76	[1]1.75	52.43
Mean	1.96	2.45	3.76	4.72	6.67	7.20	7.76	7.15	6.26	4.53	3.20	2.02	57.68

[1] Partly estimated.

TABLE 154

EVAPORATION NEAR INDEPENDENCE, INYO COUNTY, CALIFORNIA

Station:
Location ------------------Three miles east of Independence. Lat. 36° 48′ N., Long. 118° 08′ W.
Elevation ------------------3,775 feet.
Evaporation pans:
Type and description--------(1) Floating pan, 3 x 3 feet square, depth 10 inches.
(2) Ground pan, 3 x 3 feet square, depth 10 inches.
(3) Ground pan, diameter 3½ feet, depth 4 feet.
Authority for data-------------U. S. Geological Survey.
Publication reference ----------Water Supply Paper 294 (25), Trans. Am. Soc. C. E. Vol. 90 (26).
Meteorologic data -------------Temperature.

Month	No. 1, Floating pan, 3 x 3 feet, square, depth 10 inches[1]					No. 2, Ground pan, 3 x 3 feet square, depth 10 inches				No. 3, Ground pan, diameter 3½ feet, depth 4 feet			
	1908	1909	1910	1911	Mean	1909	1910	1911	Mean	1909	1910	1911	Mean
	Evaporation in inches												
Jan.	-------	1.60	1.75	1.65	1.76	-------	-------	2.25	2.25	-------	2.00	2.30	2.15
Feb.	-------	2.40	2.50	2.35	2.42	-------	-------	2.25	2.25	-------	2.90	2.55	2.72
Mar.	-------	4.70	5.15	3.70	4.52	-------	-------	4.80	4.80	-------	5.60	3.95	4.78
April	-------	7.30	7.05	6.25	6.89	-------	9.50	8.12	8.81	-------	7.40	6.80	7.10
May	-------	9.60	8.29	8.01	8.63	-------	10.61	10.25	10.43	7.50	7.71	7.90	7.70
June	-------	10.10	9.90	-------	10.00	-------	11.95	-------	11.95	7.80	8.60	-------	8.20
July	-------	10.40	8.50	-------	9.45	-------	12.55	-------	12.55	7.90	8.30	-------	8.10
Aug.	-------	8.00	8.20	-------	8.10	10.70	11.80	-------	11.25	8.20	8.80	-------	8.50
Sept.	5.30	6.60	6.30	-------	6.07	8.50	8.80	-------	8.65	7.20	7.30	-------	7.25
Oct.	3.50	3.90	4.20	-------	3.89	5.80	5.60	-------	5.70	5.00	5.15	-------	5.08
Nov.	2.50	2.60	2.36	-------	2.49	3.80	2.85	-------	3.33	3.30	3.10	-------	3.20
Dec.	1.50	[2]1.85	1.24	-------	1.53	-------	1.60	-------	1.60	[2]2.20	2.15	-------	2.18
Annual	-------	69.05	65.44	-------	65.62	-------	-------	-------	83.57	-------	69.01	-------	66.96

[1] River bank where pan was floating was 4 feet above water surface.
[2] Estimated.

TABLE 155

TEMPERATURE AT INDEPENDENCE, INYO COUNTY, CALIFORNIA

Year	Mean temperature in °F. (25)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1908	38	40	50	57	58	68	79	74	66	53	47	37	56
1909	42	40	44	56	61	73	76	75	66	57	47	26	55
1910	36	41	54	60	68	73	78	77	70	59	48	42	59
Mean	39	40	49	58	62	71	78	75	67	56	47	35	56

TABLE 156

EVAPORATION AT IVANHOE COVERED RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ____________________Adjacent to north end of Silver Lake in Los Angeles. Lat. 34° 05′ N., Long. 118° 16′ W.
  Elevation ___________________Approx. 440 feet.
Evaporation pan:
  Type ________________________Floating pan in covered reservoir.
  Description _________________Square, 2 x 2 feet, 8 inches deep.
Authority for data_____________Los Angeles Dept. of Water and Power.
Publication reference _________None.
Meteorologic data _____________None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935___	1.3	1.6	1.7	1.5	2.1	1.6	1.9	1.9	1.7	2.0	2.1	1.5	20.9
1936___	1.7	1.2	1.8	1.7	2.0	2.0	1.8	1.8	2.1	1.9	1.8	1.6	21.4
1937___	2.7	1.7	2.2	2.3	1.7	1.5	1.8	1.9	2.0	1.9	1.6	1.9	23.2
Mean__	1.90	1.50	1.90	1.83	1.93	1.70	1.83	1.87	1.93	1.93	1.83	1.67	21.83

TABLE 157

EVAPORATION AT JAMESON LAKE (JUNCAL RESERVOIR), SANTA BARBARA COUNTY, CALIFORNIA

Station:
  Location ____________________On Santa Ynez River about 15 miles north of Santa Barbara. Lat. 34° 39′ N., Long. 118° 30′ W.
  Elevation ___________________Approx. 2,230 feet.
Evaporation pan:
  Type ________________________U. S. Weather Bureau pan.
  Description _________________Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data_____________Montecito County Water District.
Publication reference _________None.
Meteorologic data _____________Temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932___	0.90	1.66	4.46	5.29	6.32	8.92	10.16	10.28	9.14	6.08	_______	1.83	_______
1933___	1.43	2.49	3.39	4.78	5.27	5.87	8.85	8.53	7.14	5.31	2.49	0.85	56.40
1934___	1.46	1.84	4.31	6.21	7.01	6.31	9.27	8.28	6.56	3.99	1.85	0.97	58.06
1935___	1.02	1.99	2.62	4.20	5.42	7.88	8.20	8.17	7.14	4.70	1.91	1.37	54.62
1936___	1.53	1.31	3.90	5.25	7.02	7.76	9.02	8.38	7.30	4.29	2.15	0.92	58.83
1937___	0.57	1.47	2.60	5.31	6.53	7.74	8.28	9.15	7.65	6.11	2.45	1.16	59.02
1938___	1.07	0.90	2.80	4.83	5.75	6.36	8.03	8.24	5.95	3.87	2.11	1.52	51.43
1939___	1.31	1.67	3.00	4.95	6.01	6.63	7.23	7.80	5.63	4.42	3.07	1.57	53.29
1940___	0.94	1.31	3.50	4.34	6.14	6.89	7.75	8.52	6.63	4.90	2.07	1.07	54.06
1941___	0.95	0.77	2.37	3.55	6.15	6.12	7.23	6.63	6.65	3.97	2.03	0.86	47.28
1942___	1.13	1.56	3.44	2.86	5.45	6.16	7.12	7.25	5.41	3.58	1.66	1.09	46.71
1943___	0.83	1.54	2.55	3.78	5.27	4.47	5.30	6.20	7.39	4.75	2.03	1.13	45.24
1944___	1.22	1.42	3.95	4.73	5.41	5.21	5.92	7.09	6.69	4.51	1.13	1.12	48.40
1945___	0.88	1.43	2.28	5.07	5.97	7.78	9.34	8.08	6.70	3.12	1.29	0.56	52.50
Mean__	1.09	1.53	3.23	4.65	5.98	6.72	7.98	8.04	6.86	4.54	2.02	1.14	53.78

TABLE 158

TEMPERATURE AT JAMESON LAKE (JUNCAL RESERVOIR), SANTA BARBARA COUNTY, CALIFORNIA

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	-------	-------	-------	61	50	46	-------
1932	43	49	57	-------	-------	-------	75	74	74	64	61	46	-------
1933	44	44	55	57	58	64	72	74	67	67	56	56	60
1934	52	53	62	64	68	66	77	76	72	66	56	52	64
1935	49	53	50	58	62	72	74	76	74	62	53	51	61
1936	52	51	57	61	67	74	80	77	72	64	57	50	64
1937	39	49	53	59	66	72	79	79	72	66	56	54	62
1938	52	50	52	59	65	70	77	76	72	61	54	53	62
1939	49	47	54	63	64	71	77	78	72	63	58	54	62
1940	52	51	57	60	67	74	75	76	67	64	54	54	62
1941	50	53	54	56	67	67	76	71	64	59	56	49	60
1942	51	48	53	55	62	70	78	75	68	63	56	51	61
1943	50	53	56	60	66	65	74	72	71	64	56	50	61
1944	48	46	54	56	61	61	70	73	70	62	52	52	59
1945	50	52	50	58	61	67	78	77	73	-------	-------	-------	-------
Mean	49	50	55	59	64	69	76	75	70	63	56	51	61

TABLE 159

EVAPORATION AT JUDSON RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ------------------In projected Sec. 12, T. 18 S., R. 2 W., S. B. B. & M.
  Elevation ------------------235 feet.
Evaporation pan:
  Type ------------------------Ground pan.
  Description ----------------Square, 3 x 3 feet, depth 18 inches, set 15 inches in the ground.
Authority for data------------California Water and Telephone Company.
Publication reference ----------None.
Meteorologic data -------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1943	-------	2.69	3.51	4.29	6.81	7.07	8.22	7.55	6.04	4.65	4.16	1.59	-------
1944	2.35	1.97	2.28	5.27	6.08	6.74	8.12	7.62	5.60	4.50	2.26	2.51	55.30
1945	2.10	2.30	2.70	5.19	6.99	6.45	7.34	6.67	6.50	4.97	4.02	2.44	57.67
1946	2.74	2.55	3.82	4.69	6.65	-------	-------	-------	-------	-------	-------	-------	-------
Mean	2.40	2.38	3.08	4.86	6.63	6.75	7.89	7.28	6.05	4.71	3.48	2.18	57.69

TABLE 160

EVAPORATION AT KINGSBURG, FRESNO COUNTY, CALIFORNIA

Station:	
Location	At Kingsburg on Kings River. Lat. 36° 32′ N., Long. 119° 33′ W.
Elevation	285 feet.
Evaporation pans:	
Type and description	(1) Floating pan, square, 3 x 3 feet, depth 15 inches.[1] (2) Ground pan, square, 3 x 3 feet, depth 15 inches, set in ground a few inches and banked up even with water in the pan.[2]
Authority for data	State Engineer of California.
Publication reference	Physical Data and Statistics of California (18). Report of Irrigation Investigations in California (31). Water Supply Paper 81 (27).
Meteorologic data	Air and water temperatures.

Month	Floating pan						Ground pan					
	1881	1882	1883	1884	1885	Mean	1881	1882	1883	1884	1885	Mean
	Evaporation in inches											
January	-------	1.08	0.72	1.26	0.12	0.80	-------	2.40	0.48	0.90	1.20	1.24
February	-------	1.38	1.20	0.60	1.68	1.22	-------	1.26	0.84	0.72	1.56	1.10
March	-------	2.16	3.66	1.08	2.88	2.44	-------	3.18	3.72	1.26	2.64	2.70
April	-------	3.12	3.24	1.92	1.92	2.55	-------	5.22	3.12	2.16	3.24	3.44
May	-------	3.66	1.92	3.84	4.08	3.38	-------	10.02	3.72	4.80	7.92	6.62
June	-------	5.70	6.00	3.54	7.92	5.79	-------	11.28	10.20	6.06	9.72	9.32
July	-------	7.92	9.12	4.56	8.52	7.53	-------	12.90	11.64	8.04	10.80	10.84
August	-------	7.98	11.04	4.44	11.16	8.66	-------	10.50	11.64	8.04	11.16	10.34
September	-------	5.70	8.76	3.84	7.68	6.50	-------	6.90	8.46	6.24	7.92	7.38
October	-------	1.62	4.80	4.20	5.64	4.06	-------	2.34	3.48	3.72	4.32	3.46
November	2.64	1.38	2.04	2.40	-------	2.12	4.02	1.20	1.68	1.44	-------	2.08
December	0.60	1.02	0.96	2.16	-------	1.18	1.44	1.08	0.78	1.68	-------	1.24
Annual	-------	42.72	53.46	33.84	-------	46.23	-------	68.28	59.76	45.06	-------	59.76

[1] At the floating pan some protection was afforded against sun and wind by high river banks, a fringe of low trees and a nearby bridge.

[2] During the first 3 months the ground pan was located on a railroad bridge.

TABLE 161

TEMPERATURES OF AIR AND WATER AT KINGSBURG, FRESNO COUNTY, CALIFORNIA (18) (31)

Month	Temperature of air in °F.						Temperature of water in floating pan in °F.						Temperature of water in ground pan in °F.					
	1881	1882	1883	1884	1885	M	1881	1882	1883	1884	1885	M	1881	1882	1883	1884	1885	M
	Mean temperature in °F.																	
January	----	54	43	47	48	48	----	50	43	48	49	48	----	53	41	44	47	46
February	----	56	54	52	54	54	----	54	49	52	53	52	----	56	52	49	51	52
March	----	64	69	61	65	65	----	59	62	57	60	60	----	66	60	57	59	60
April	----	73	67	67	68	69	----	62	62	61	63	62	----	72	61	61	63	64
May	----	84	76	76	75	78	----	63	63	61	65	63	----	77	67	69	68	70
June	----	88	92	77	77	83	----	68	71	60	68	67	----	83	77	61	71	73
July	----	98	96	83	84	90	----	81	84	63	74	76	----	91	78	73	74	79
August	----	96	93	78	86	88	----	85	83	66	72	76	----	85	75	69	72	75
September	----	81	88	75	79	81	----	73	79	63	74	72	----	75	73	64	71	71
October	----	68	69	68	71	69	----	63	62	63	66	64	----	60	57	60	63	60
November	66	53	59	58	----	59	55	52	54	57	----	54	60	49	52	55	----	54
December	55	51	49	50	----	51	52	50	47	47	----	49	55	46	44	48	----	48
Annual	----	72	71	66	----	70	----	63	63	58	----	62	----	68	61	59	----	63

TABLE 162

EVAPORATION AT LA CIENEGA, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ------------------One mile south of Coldbrook Camp on North Fork of San Gabriel River. Lat. 34° 18′ N., Long. 117° 50′ W.[1]
  Elevation ------------------4,650 feet.
Evaporation pan:
  Type ----------------------Ground pan.
  Description ----------------Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data-------------Los Angeles County Flood Control District.
Publication reference ----------Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data -------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932---	0.99	0.94	3.82	4.13	4.93	5.11	6.84	6.54	6.48	4.04	3.44	1.04	48.30
1933---	1.15	1.69	3.20	3.64	4.72	5.41	7.55	7.72	6.88	4.39	3.27	1.04	50.66
1934---	2.53	0.98	3.29	3.76	5.54	4.29	7.66	7.22	6.23	3.55	2.74	1.27	49.06
1935---	0.64	0.96	-------	1.55	2.68	5.16	6.87	7.27	4.26	3.32	-------	-------	-------
Mean--	1.32	1.14	3.44	3.27	4.47	4.99	7.23	7.19	5.96	3.82	3.15	1.12	47.10

[1] In mountain area covered with trees and brush.

TABLE 163

EVAPORATION AT LAKE CHABOT, ALAMEDA COUNTY, CALIFORNIA

Station:
  Location ------------------About one mile east of San Leandro. Lat. 37° 44′ N., Long. 122° 07′ W.
  Elevation ------------------Maximum 233 feet, minimum 168 feet, varies with lake level.
Evaporation pan:
  Type ----------------------Floating pan.
  Description ----------------Circular, copper, diameter 22 inches, depth 9 inches.
Authority for data-------------East Bay Municipal Utility District.
Publication reference ----------None.
Meteorologic data -------------None.

Year	Evaporation in inches[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1909---	-------	-------	-------	-------	5.76	6.82	7.68	7.05	4.31	2.73	-------	-------	-------
1910---	-------	-------	-------	4.15	5.45	6.19	6.74	5.97	4.83	3.92	-------	-------	-------
1911---	-------	-------	-------	2.23	4.67	5.32	5.88	5.65	4.38	3.36	-------	-------	-------
1912---	-------	-------	-------	-------	-------	5.87	7.14	6.42	-------	-------	-------	-------	-------
1913---	-------	-------	-------	3.30	-------	5.98	7.10	-------	5.44	4.11	-------	-------	-------
1914---	-------	-------	-------	1.20	4.50	4.68	6.26	6.89	6.38	2.82	-------	-------	-------
1915---	-------	-------	-------	1.65	2.06	6.40	4.66	5.52	5.70	-------	-------	-------	-------
1916---	-------	-------	-------	-------	4.03	3.81	6.69	4.23	-------	-------	-------	-------	-------
1917---	-------	-------	-------	1.84	4.61	5.94	6.72	6.85	5.92	5.31	-------	-------	-------
1918---	-------	-------	-------	-------	6.43	6.64	7.22	-------	-------	-------	-------	-------	-------
1919---	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
1920---	-------	-------	-------	-------	-------	6.38	6.65	6.86	6.16	-------	-------	-------	-------
1921---	-------	-------	-------	-------	-------	7.70	7.68	6.06	6.72	5.85	-------	-------	-------
1922---	-------	-------	-------	-------	-------	5.96	7.38	6.89	6.19	-------	-------	-------	-------
1923---	-------	-------	-------	-------	4.29	4.85	6.12	6.93	6.05	5.14	-------	-------	-------
1924---	-------	-------	-------	2.83	4.20	3.83	4.89	4.76	3.89	-------	-------	-------	-------
Mean--	-------	-------	-------	2.46	4.60	5.76	6.57	6.16	5.50	4.16	-------	-------	-------

[1] Records for missing months during the rainy season were generally unreliable.

TABLE 164

EVAPORATION AT LAKE CHABOT, ALAMEDA COUNTY, CALIFORNIA

Station:
  Location ------------------ About one mile east of San Leandro. Lat. 37° 44′ N., Long. 122° 07′ W.
  Elevation ------------------ Maximum 233 feet, minimum 168 feet.
Evaporation pan:
  Type ------------------------ Floating pan.
  Description ---------------- Square, 3 x 3 feet, depth 18 inches.
Authority for data ------------ East Bay Municipal Utility District.
Publication reference --------- None.
Meteorologic data ------------- None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	-------	-------	-------	-------	-------	-------	-------	-------	5.04	4.41	2.04	1.76	-------
1933	0.54	1.34	2.19	3.83	4.02	5.66	6.42	5.97	4.72	3.64	3.43	1.52	43.28
1934	1.14	1.16	2.54	4.28	5.42	5.45	6.37	6.02	5.42	3.61	1.76	2.29	45.46
1935	1.52	1.61	2.32	3.36	5.54	6.46	6.68	5.90	4.24	3.75	2.64	1.66	45.68
1936	1.00	0.80	3.29	3.61	6.27	5.82	6.97	6.15	4.86	3.30	2.28	1.64	45.99
1937	1.63	1.07	1.48	3.18	4.84	4.86	6.02	5.61	4.46	2.99	2.06	1.76	39.96
1938	1.33	0.63	1.52	2.74	4.50	5.44	5.43	5.79	4.37	3.03	3.09	1.50	49.37
1939	1.18	1.67	1.98	3.98	4.90	6.33	6.10	5.61	4.98	3.78	2.71	1.49	44.71
1940	1.34	1.38	2.78	3.17	4.83	5.87	6.50	5.57	4.07	3.74	2.60	1.78	43.63
1941	1.51	1.24	2.27	2.93	4.17	5.01	5.70	4.77	-------	-------	-------	-------	-------
Mean	1.24	1.21	2.26	3.45	4.94	5.66	6.24	5.71	4.68	3.58	2.51	1.71	43.19

TABLE 165

EVAPORATION AT LAKE CURRY, NAPA COUNTY, CALIFORNIA

Station:
  Location ------------------ At City of Vallejo impounding reservoir on headwaters of Suisun Creek at mouth of Gordon Valley. Lat. 38° 21′ N., Long. 122° 08′ W.[1]
  Elevation ------------------ 248 feet.
Evaporation pan:
  Type ------------------------ U. S. Weather Bureau pan.
  Description ---------------- Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data ------------ City of Vallejo Water Department.
Publication reference --------- None.
Meteorologic data ------------- Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	1.16	2.20	4.50	6.16	9.92	9.15	13.06	10.52	7.94	4.82	3.10	0.80	73.33
1932	1.82	2.56	2.86	5.18	7.03	9.36	10.60	9.85	7.98	6.28	3.78	1.87	69.17
1933	1.28	3.45	3.83	5.77	6.15	8.41	10.78	10.73	7.91	6.23	3.09	1.18	68.81
1934	1.87	1.66	3.77	5.98	7.37	8.48	10.45	9.72	8.16	4.62	1.74	1.91	65.73
1935	1.19	1.88	3.26	3.88	7.58	9.64	8.83	9.19	6.78	4.74	2.10	1.24	60.31
1936	1.74	1.73	4.73	4.94	7.66	7.78	9.51	9.13	7.22	4.98	2.44	1.48	63.34
1937	1.35	1.54	2.73	5.22	7.51	8.07	9.85	9.67	7.05	4.39	1.70	1.28	60.36
1938	1.36	1.45	2.68	3.97	6.82	9.12	9.62	8.80	7.12	3.60	3.42	1.36	59.32
1939	1.41	2.93	3.06	5.63	7.15	10.69	11.44	10.17	7.94	5.41	2.94	1.64	70.41
1940	1.16	1.45	3.61	3.88	6.67	9.76	10.37	9.54	6.31	4.29	2.07	1.46	60.57
1941	1.20	1.00	2.40	3.67	5.03	8.03	9.74	9.55	7.30	4.70	2.40	1.36	56.38
1942	0.99	2.06	4.40	3.57	6.10	8.32	10.11	9.19	6.93	4.91	1.97	1.04	59.59
1943	1.14	1.59	2.59	4.75	8.70	8.30	10.08	9.42	7.37	4.47	2.60	1.36	62.37
1944	1.35	-------	4.47	6.79	7.50	9.74	9.71	8.06	4.59	-------	-------	1.36	-------
1945	1.22	2.53	2.75	6.11	6.09	9.63	10.36	9.70	8.91	5.34	1.71	1.05	65.40
Mean	1.35	2.00	3.44	5.03	7.15	8.96	10.30	9.55	7.30	4.91	2.50	1.36	63.85

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[1] Pan set on flat land 150 feet south of toe of earth dam, in valley with hills 50 feet east and 450 feet west. Crest of dam 72 feet above the pan.

TABLE 166

EVAPORATION AT LAKE CURRY, NAPA COUNTY, CALIFORNIA

Station:
  Location ------------------At City of Vallejo impounding reservoir on headwaters of Suisun Creek at mouth of Gordon Valley. Lat. 38° 21′ N., Long. 122° 08′ W.
  Elevation ------------------320 feet.
Evaporation pan:
  Type ------------------Floating pan, U. S. Weather Bureau type.
  Description ------------------Diameter 4 feet, depth 10 inches, set on raft in reservoir.
Authority for data------------City of Vallejo Water Department.
Publication reference ---------None.
Meteorologic data ------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931---	0.84	1.85	3.78	5.78	8.63	8.77	11.89	10.12	7.80	5.13	2.98	0.67	-------
1932---	1.60	-------	-------	-------	6.15	7.81	8.51	8.76	7.48	6.28	4.06	1.88	-------
1933---	1.50	3.37	3.72	5.48	5.91	8.31	10.37	10.40	6.10	5.50	-------	-------	-------
1934---	-------	1.10	3.48	5.75	6.65	-------	9.86	9.17	7.47	3.66	1.37	-------	-------
1935---	0.90	-------	-------	-------	8.49	9.22	9.25	10.00	7.12	5.53	2.38	1.53	-------
1936---	-------	1.70	-------	3.81	2.74	8.79	10.01	9.64	7.04	5.07	3.14	2.49	-------
1937---	-------	1.37	2.51	-------	-------	8.08	11.07	10.74	7.44	4.21	2.83	1.70	-------
1938---	1.67	-------	-------	3.46	5.42	-------	10.08	9.38	7.47	4.29	-------	-------	-------
1939---	1.17	-------	2.34	5.42	-------	9.39	11.08	10.52	7.36	5.81	3.05	2.34	-------
1940---	1.24	-------	2.27	4.74	7.24	9.01	9.06	8.54	5.94	4.18	2.70	1.62	-------
1941---	1.38	-------	2.40	4.24	5.92	8.59	9.39	-------	-------	-------	-------	-------	-------
1942---	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
1943---	-------	-------	-------	5.53	8.59	10.18	10.45	-------	7.42	5.53	2.48	-------	-------
Mean--	1.28	1.88	3.03	4.91	6.57	8.82	10.08	9.73	6.47	5.02	2.78	1.75	62.32

TABLE 167

TEMPERATURE AT LAKE CURRY, NAPA COUNTY, CALIFORNIA[1]

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931---	48	53	55	59	67	67	76	72	66	61	50	43	60
1932---	44	46	54	54	60	67	70	70	64	63	56	36	57
1933---	42	48	51	56	54	60	62	72	61	63	54	43	56
1934---	44	46	56	60	63	66	70	72	70	62	64	47	60
1935---	44	48	46	55	60	70	70	72	68	60	50	46	57
1936---	48	48	56	58	64	68	73	72	70	64	53	45	60
1937---	37	46	52	55	62	70	73	72	68	64	54	49	58
1938---	46	48	50	55	62	68	72	70	70	60	52	48	58
1939---	46	46	52	61	64	70	73	72	72	62	55	50	60
1940---	48	52	54	56	64	72	71	72	67	63	52	51	60
1941---	48	52	52	55	62	66	71	72	69	60	52	56	60
1942---	46	50	52	54	58	74	76	72	71	66	58	52	60
1943---	51	56	60	60	64	64	72	72	70	62	54	50	61
1944---	46	50	54	55	60	64	68	74	78	68	56	42	60
1945---	46	52	50	59	61	70	74	72	72	66	54	48	60
Mean--	46	49	53	57	62	68	71	72	69	63	54	47	59

[1] Records by City of Vallejo Water Department.

TABLE 168

WIND MOVEMENT AT LAKE CURRY, NAPA COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	1,114	1,283	1,758	1,571	2,528	2,093	2,019	1,956	1,896	1,466	1,375	1,168	20,227
1932	1,655	1,632	1,557	1,517	1,726	2,000	1,870	1,860	1,410	2,045	1,365	1,310	19,947
1933	1,352	1,811	1,585	1,707	1,561	1,614	1,748	1,616	1,698	1,770	1,061	1,162	18,685
1934	1,493	912	1,012	1,262	1,448	1,820	1,613	1,525	1,199	1,047	703	1,193	15,227
1935	749	943	1,333	1,065	1,859	1,418	1,356	1,290	1,106	1,269	811	650	13,849
1936	1,132	1,060	1,531	1,259	1,583	1,210	1,145	1,118	833	864	549	637	12,921
1937	1,201	767	887	1,480	1,427	1,370	1,489	1,146	1,025	1,045	649	795	13,281
1938	844	1,158	1,584	968	1,208	1,587	1,445	1,157	947	871	1,259	879	13,907
1939	1,074	1,691	1,330	1,335	1,601	1,752	1,911	1,766	1,157	982	625	905	16,129
1940	1,062	1,164	1,286	907	1,304	1,548	1,619	1,574	1,256	733	848	1,090	14,391
1941	1,064	846	1,251	1,095	1,291	1,367	1,385	1,288	1,164	738	869	793	13,151
1942	713	1,222	1,375	1,119	1,253	1,251	1,301	1,089	913	812	699	624	12,371
1943	1,078	685	733	1,106	1,607	1,342	1,341	821	669	375	869	874	11,506
1944	1,079	636	1,590	1,049	1,077	1,186	1,625	972	823	471	649	-------	-------
1945	574	1,307	1,050	1,638	1,116	1,101	1,431	1,148	1,377	1,180	703	791	13,416
Mean	1,079	1,141	1,324	1,272	1,506	1,511	1,553	1,353	1,165	1,045	869	919	14,739

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[1] Records by City of Vallejo Water Department.

TABLE 169

EVAPORATION AT LAKE ELEANOR, TUOLUMNE COUNTY, CALIFORNIA

Station:
Location ------------------ About 12 miles north of Sequoia, in Yosemite National Park, in Sec. 35, T. 2 N., R. 19 E. Lat. 38° 00′ N., Long. 119° 51′ W.
Elevation ------------------ Approx. 4,650 feet.
Evaporation pan:
Type ------------------------ Floating pan hung in a raft of logs, anchored about 1,000 feet offshore.
Description ---------------- Diameter 4 feet, depth 10 inches.
Authority for data------------- San Francisco Public Utilities Commission.
Publication reference ---------- Water Supply Papers 411, 441, 461, and 481 (15).
Meteorologic data ------------- None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1910	-------	-------	-------	-------	-------	-------	5.84	6.21	4.03	2.43	-------	-------	-------
1911	-------	-------	-------	2.45	4.33	3.96	5.50	6.25	4.63	2.13	1.73	-------	-------
1912	-------	1.59	-------	1.97	3.99	4.82	6.32	6.50	3.84	2.10	2.26	1.28	-------
1913	-------	1.25	2.50	3.08	3.38	4.63	5.58	6.60	5.88	4.97	0.97	1.03	-------
1914	-------	1.53	2.99	2.64	-------	-------	-------	-------	-------	-------	-------	-------	-------
1915	-------	-------	2.75	-------	-------	5.50	6.72	7.83	7.12	5.39	4.68	3.03	-------
1916	[1]1.81	[1]1.80	[1]1.81	2.74	3.59	4.96	7.07	7.70	4.48	2.11	1.97	1.67	-------
1917	-------	-------	-------	-------	-------	5.09	8.35	8.75	7.37	5.54	3.45	2.14	-------
1918	[1]1.95	-------	-------	3.90	[2]6.80	7.80	9.70	9.90	[2]6.20	-------	-------	-------	-------
1919	-------	-------	1.71	2.54	3.74	5.25	6.89	7.47	5.44	3.53	2.29	1.51	-------
Mean	1.88	1.54	2.35	2.76	4.30	5.25	6.88	7.47	5.44	3.52	2.48	1.78	45.65

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[1] Estimated by resident engineer.
[2] Incomplete.

TABLE 170

EVAPORATION AT LAKE ELSINORE, RIVERSIDE COUNTY, CALIFORNIA

Station:
  Location ------------------ Near northeast lake shore at town of Elsinore. Lat. 33° 40′ N., Long. 117° 20′ W.
  Elevation ------------------ 1,260 feet.
Evaporation pan:
  Type ------------------ Floating pan.
  Description ------------------ Square, 3 x 3 feet, 18 inches deep.
Authority for data ------------------ Volcan Land and Water Company.
Publication reference ------------------ Unpublished report by George Cromwell, Engr. for San Diego County Water Co. (11).
Meteorologic data ------------------ None.

Month and year	Evaporation in inches	Month and year	Evaporation in inches
1916		1916	
May	7.75	November	3.12
June	7.35	December	1.90
July	8.42	1917	
August	8.58	January	1.60
September	6.41	February	1.88
October	3.12	March	3.93

TABLE 171

EVAPORATION AT LAKE ELSINORE, RIVERSIDE COUNTY, CALIFORNIA

Station:
  Location ------------------ On northeast lake shore in town of Elsinore. Lat. 33° 40′ N., Long. 117° 20′ W.[1]
  Elevation ------------------ 1,260 feet.
Evaporation pan:
  Type ------------------ U. S. Weather Bureau pan.
  Description ------------------ Diameter 4 feet, depth 10 inches, set on 2 x 4 timber grill.
Authority for data ------------------ Division of Irrigation, Soil Conservation Service, U. S. D. A.
Publication reference ------------------ Evaporation Studies at Lake Elsinore, Calif. (47).
Meteorologic data ------------------ Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1938	-------	-------	-------	-------	-------	-------	12.09	10.47	8.63	5.64	4.76	3.00	-------
1939	3.05	3.81	4.57	7.14	8.19	9.41	10.51	9.81	6.56	5.51	2.95	2.32	73.83
1940	2.26	3.07	5.00	6.56	9.43	9.45	11.61	10.73	8.00	5.85	3.77	2.27	78.00
1941	1.84	2.58	4.78	5.32	8.54	8.59	10.10	8.26	7.26	4.57	3.04	1.84	66.72
1942	2.39	3.11	5.28	5.54	8.46	9.15	11.22	9.72	7.49	5.54	3.58	2.28	73.76
1943	2.58	3.18	4.48	6.25	9.34	9.72	10.72	10.55	9.13	6.02	4.40	2.15	78.52
Mean	2.42	3.15	4.82	6.16	8.79	9.26	11.04	9.92	7.84	5.52	3.75	2.31	74.98

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[1] Exposure to wind off the lake generally good except in the last half of 1942 when willow brush grew up between the lake and the pan to reduce wind movement. Early in 1943 the station was moved 100 yards to a more open location.

TABLE 172

EVAPORATION AT LAKE ELSINORE, RIVERSIDE COUNTY, CALIFORNIA

Station:	
Location	On northeast lake shore in town of Elsinore. Lat. 33° 40′ N., Long. 117° 20′ W.[1]
Elevation	1,260 feet.
Evaporation pan:	
Type	Ground pan.
Description	Diameter 2 feet, depth 3 feet, set in ground 2.75 feet, screened with ¼ inch mesh galvanized hardware cloth.
Authority for data	Division of Irrigation, Soil Conservation Service, U. S. D. A.
Publication reference	Evaporation Studies at Lake Elsinore, Calif. (47).
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1938	-------	-------	-------	-------	-------	-------	8.62	8.03	6.55	4.88	4.44	2.82	-------
1939	2.67	3.27	3.38	5.40	6.32	7.58	8.52	7.57	5.26	4.68	2.64	1.97	59.26
1940	1.95	2.42	3.52	4.93	7.12	7.38	9.27	7.82	6.16	4.68	3.26	2.12	60.63
1941	1.52	2.08	3.70	4.12	6.18	6.49	7.30	6.54	5.75	3.91	2.58	1.84	52.01
1942	1.78	2.22	3.77	4.16	6.30	6.90	8.67	8.06	5.91	4.52	3.11	2.13	57.53
1943	2.23	2.32	3.41	5.17	7.63	7.76	8.50	8.98	7.50	5.39	4.04	2.20	65.13
Mean	2.03	2.46	3.56	4.76	6.71	7.22	8.48	7.83	6.18	4.68	3.34	2.18	59.43

[1] Exposure to wind off the lake generally good except in the last half of 1942 when willow brush grew up between the lake and the pan to reduce wind movement. Early in 1943 the station was moved 100 yards to a more open location.

TABLE 173

EVAPORATION AT LAKE ELSINORE, RIVERSIDE COUNTY, CALIFORNIA

Station:
Location ____________________Lake Elsinore, Lat. 33° 40′ N., Long. 117° 20′ W.
Elevation ____________________1,260 feet.
Evaporation basin: ____________Lake Elsinore, area 5,500 acres at overflow level.
Authority for data_____________Computed from records of inflow, rainfall and changes in lake levels.
Publication reference __________None.
Meteorologic data _____________None.

Year	Indicated depth of evaporation in inches[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1916	-------	-------	-------	-------	5.0	5.6	7.7	7.2	7.7	3.1	3.1	-------	-------
1917	1.0	1.9	2.6	3.8	5.4	5.4	-------	-------	-------	-------	-------	-------	-------
1918	2.6	1.2	2.6	-------	5.0	6.0	6.1	7.4	7.4	4.4	3.1	3.4	-------
1919	1.4	1.4	1.7	3.8	-------	-------	4.8	7.2	6.5	5.3	4.3	1.1	-------
1920	3.1	1.6	3.4	3.1	5.4	7.2	7.2	8.4	6.0	5.8	2.5	1.7	55.4
1921	2.2	-------	2.8	4.8	3.5	6.0	7.3	9.6	8.5	4.8	2.5	-------	-------
1922	-------	-------	-------	3.7	5.3	4.8	8.4	7.2	7.2	6.1	1.6	1.6	-------
1923	1.4	1.4	4.0	5.2	6.0	6.0	7.2	7.2	7.2	6.2	3.1	2.6	57.5
1924	1.3	1.3	4.0	2.6	6.0	7.2	8.4	6.0	7.2	5.0	4.1	2.3	55.4
1925	1.3	1.4	2.6	4.8	4.2	6.4	8.4	9.6	4.8	4.8	2.4	2.4	53.1
1926	2.4	-------	1.7	5.6	5.0	7.2	8.4	7.2	6.0	6.1	4.3	-------	-------
1927	-------	-------	-------	4.4	7.9	6.0	-------	7.2	4.8	7.0	1.9	2.5	-------
1928	1.7	-------	3.0	4.9	5.6	6.6	8.4	8.4	7.2	4.3	3.1	2.9	-------
1929	1.3	1.7	2.2	4.7	6.0	8.4	6.0	7.3	7.1	6.0	4.8	2.4	57.9
1930	-------	-------	-------	5.6	3.5	8.4	8.4	7.2	7.2	5.0	3.6	2.4	-------
1931	-------	-------	2.4	3.8	6.4	7.2	7.2	8.9	6.1	5.4	3.4	1.2	-------
1932	-------	-------	-------	5.4	4.8	7.3	8.4	7.2	7.4	4.8	2.4	-------	-------
1933	-------	-------	2.4	4.0	6.4	6.0	8.4	9.6	4.8	6.1	3.7	2.9	-------
1934	-------	2.0	2.8	6.0	8.4	5.0	9.6	7.7	4.9	5.2	3.0	-------	-------
1935	-------	-------	2.6	3.8	5.2	7.2	8.4	8.3	6.6	3.7	2.9	1.6	-------
1936	1.3	-------	3.8	4.2	7.3	7.3	7.3	8.5	7.0	-------	3.7	-------	-------
1937	2.6	-------	-------	5.4	9.1	7.1	8.5	9.8	8.6	6.4	2.5	4.0	-------
1938	1.6	-------	-------	3.8	6.2	7.8	8.3	7.8	6.8	5.5	5.0	3.0	-------
1939	2.8	2.6	3.6	4.2	5.9	7.3	7.9	7.7	5.5	5.2	2.6	2.2	57.5
1940	1.9	2.0	2.9	4.4	6.2	7.3	8.4	7.4	6.7	5.3	4.1	2.5	59.1
1941	1.2	1.3	3.2	4.0	5.6	6.5	7.6	7.2	6.7	4.4	2.8	1.4	51.9
Mean	1.8	1.6	2.9	4.4	5.8	6.7	7.8	7.9	6.6	5.2	3.2	2.3	56.2

[1] Months for which records were uncertain are omitted.

TABLE 174

TEMPERATURE AT LAKE ELSINORE, RIVERSIDE COUNTY, CALIFORNIA

Year	Mean temperature in ° F. (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1916	46	56	61	64	70	73	77	76	73	61	53	45	63
1917	43	49	48	50	56	74	82	78	76	70	61	57	62
1918	53	53	58	62	64	79	79	79	76	70	57	50	65
1919	53	49	53	62	67	74	80	80	75	62	56	53	64
1920	54	54	53	58	66	72	80	80	74	63	57	51	64
1921	50	54	58	58	62	72	81	79	74	70	61	56	65
1922	49	50	52	57	70	75	80	82	80	67	55	54	64
1923	53	51	57	60	68	69	78	77	75	66	60	53	64
1924	50	59	54	60	69	76	78	79	77	64	60	51	65
1925	52	57	58	60	66	75	82	79	72	64	58	54	65
1926	51	57	60	64	68	75	79	80	74	69	60	48	65
1927	50	54	52	59	65	71	80	78	70	66	58	48	63
1928	51	52	56	60	67	71	78	77	75	63	55	48	63
1929	47	47	53	56	66	71	80	83	73	69	59	56	63
1930	49	56	56	62	61	72	80	78	67	63	59	50	63
1931	52	54	58	64	70	72	82	79	71	65	52	47	64
1932	44	49	57	59	62	68	74	75	72	64	60	46	61
1933	45	47	54	55	58	68	77	76	68	67	58	49	60
1934	48	55	64	64	70	69	80	79	75	68	59	53	65
1935	51	53	52	60	63	72	77	80	76	64	55	52	63
1936	53	52	59	62	68	74	82	80	75	66	59	51	65
1937	41	51	54	59	66	72	80	80	78	70	60	56	64
1938	54	52	54	60	65	70	76	80	78	65	57	56	64
1939	51	47	54	63	65	73	79	81	76	66	61	58	65
1940	54	53	59	63	70	73	80	80	73	68	58	56	66
1941	52	55	58	57	68	70	79	76	70	63	59	51	63
1942	53	50	55	59	65	72	81	79	73	67	60	54	64
1943	52	56	58	63	67	70	78	79	78	69	59	52	65
1944	51	50	55	58	65	67	74	78	74	67	55	53	62
1945	51	53	52	59	63	70	79	79	75	68	56	54	63
Mean	50	53	56	60	66	72	79	79	74	66	58	52	64

TABLE 175

WIND MOVEMENT AT LAKE ELSINORE, RIVERSIDE COUNTY, CALIFORNIA

Year	Total wind in miles[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1938	-------	-------	-------	-------	-------	-------	1,960	1,697	1,092	1,279	-------	1,188	-------
1939	1,558	2,287	1,981	2,088	1,902	-------	-------	-------	-------	-------	-------	-------	-------
1940	-------	1,517	1,908	1,969	1,833	1,509	1,648	1,408	1,460	1,486	1,394	1,130	-------
1941	1,136	1,496	1,596	1,655	1,781	1,861	1,209	1,263	1,440	1,376	944	1,117	16,874
1942	944	1,462	1,622	1,798	1,693	1,034	774	886	819	900	640	616	13,188
1943	1,752	1,479	2,005	2,364	2,703	2,320	1,767	1,949	1,652	1,855	1,555	1,545	22,946
Mean	1,348	1,648	1,822	1,975	1,982	1,681	1,472	1,441	1,293	1,379	1,133	1,119	18,293

[1] Records by the Division of Irrigation, Soil Conservation Service, U. S. D. A.

TABLE 176

EVAPORATION AT LAKE HODGES, SAN DIEGO COUNTY, CALIFORNIA

Station:	
Location	On San Dieguito River, south of Escondido. Lat. 33° 02′ N., Long. 117° 07′ W.
Elevation	330 feet.
Evaporation pan:	
Type	Ground pan.
Description	Square concrete basin, 3 x 3 feet, depth 18 inches, set 15 inches in ground. Thickness of concrete wall, 4 inches.
Authority for data	San Diego Water Department, Division of Water Development and Conservation.
Publication reference	None.
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	3.24	2.17	4.29	5.79	8.27	7.79	9.16	8.44	7.54	4.64	3.08	1.75	66.16
1935	1.42	2.74	2.78	4.30	6.01	7.65	8.51	8.21	6.95	5.63	3.13	2.55	59.88
1936	2.56	.95	3.63	5.24	7.16	8.51	8.57	8.60	6.97	6.28	3.67	1.04	63.18
1937	2.37		2.58	4.61	5.17	6.84	7.68	7.76	6.55	4.64	2.90		
1938	2.84	1.82	3.53	4.84	6.00	7.38	8.57	7.77	7.32	7.75	4.53	1.80	
1939		2.60	2.57	4.16	6.42	7.66	8.55	7.82	5.34	5.19	3.23	3.00	
1940	1.22	2.15	4.01	6.67	6.60	7.16	8.74	8.04	6.27	4.71	3.55	3.10	62.22
1941	1.31	1.36	2.53	3.24	5.86	7.15	7.92	7.19	6.04	3.84	3.40	1.06	50.90
1942	1.83	2.25	3.57	3.27	6.07	6.85	7.94	7.56	5.87	4.70	2.94	2.29	55.14
1943	1.87	2.42	2.70	3.86	6.51	6.96	8.12	7.81	6.46	4.92	4.74	1.41	57.78
1944	2.14	1.86	3.95	4.73	5.55	6.13	8.64	8.54	6.47	4.93	2.09	2.34	57.37
1945	1.98	2.13	2.42	4.85	6.42	5.98	7.61	6.53	6.67	4.70	3.29	2.19	54.67
Mean	2.07	2.04	3.21	4.63	6.34	7.17	8.33	7.86	6.53	5.16	3.38	2.05	58.77

TABLE 177

EVAPORATION AT LAKE HODGES, SAN DIEGO COUNTY, CALIFORNIA

Station:	
Location	On San Dieguito River, south of Escondido. Lat. 33° 02′ N., Long. 117° 07′ W.
Elevation	330 feet.
Evaporation pan:	
Type	Floating pan.
Description	Square, 3 x 3 feet, depth 18 inches, painted black.
Authority for data	San Diego Water Department, Division of Water Development and Conservation.
Publication reference	None.
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	3.51	1.89	2.84	5.04	7.17	7.26	7.06	7.38	7.06	4.95	4.10	2.44	60.70
1935	2.22	2.81	2.73	4.12	5.92	6.57	6.86	6.74	6.24	5.00	3.26	2.48	54.95
1936	2.61	1.18	3.38	4.69	6.25	6.71	6.97	6.70	6.04	6.27	4.33	1.68	56.81
1937	3.14		3.28	4.66	4.88	6.27	6.99	6.94	6.36	5.06	3.34	2.91	
1938	3.04	2.30		4.95	5.57	6.23	7.08	6.64	6.70	5.18		1.93	
1939		2.69	2.46	3.85	6.08	6.96	7.77	7.06	5.77	6.10	3.69	2.69	
1940	1.35	2.26	3.47	6.36	5.59	5.94	7.25	6.74	5.55	4.73	4.50	3.15	56.89
1941	1.44	1.20	2.54	3.27	5.12	5.80	6.45	6.24	6.12	4.66	3.94	1.59	48.37
1942	2.07	2.42	3.45	3.41	5.46	5.96	6.88	6.93	6.01	5.03	3.89	2.40	53.91
1943	2.28		2.58	3.49	5.64	5.91	6.79	6.56	5.85	4.88		1.39	
1944	2.26	1.96	3.68	4.42	4.85	5.39	6.81	6.75	5.92	4.34	2.94	2.96	52.28
1945	1.98	2.07	3.95	4.33	5.90	5.49	6.44	6.00	7.04	5.39	4.52	2.76	55.87
Mean	2.35	2.08	3.12	4.38	5.70	6.21	6.94	6.72	6.22	5.13	3.85	2.36	55.06

TABLE 178

EVAPORATION AT LAKE MATHEWS (CAJALCO RESERVOIR), RIVERSIDE COUNTY, CALIFORNIA

Station:	
Location	At Metropolitan Water District's Cajalco reservoir, 5 miles south of Arlington. Lat. 33° 51′ N., Long. 117° 26′ W.*
Elevation	1,400 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	Metropolitan Water District of Southern California.
Publication reference	None.
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec	Annual
1939	3.49	3.85	4.06	6.68	8.72	12.03	12.83	11.55	8.78	7.17	4.58	4.28	88.02
1940	2.52	2.67	5.19	6.58	10.14	9.92	13.76	12.16	8.77	7.22	5.05	2.65	86.63
1941	1.69	1.85	3.81	4.94	8.52	8.70	11.58	9.14	7.33	5.30	4.49	2.10	69.45
1942	2.90	3.03	5.53	4.85	8.22	8.35	11.84	10.25	7.17	5.73	4.55	3.04	75.46
1943	3.89	3.37	3.46	5.17	8.81	9.42	10.24	9.34	8.26	5.62	4.75	2.52	74.85
1944	2.57	2.58	5.53	5.14	6.82	7.20	9.09	10.62	7.49	5.41	2.61	2.45	[1]67.51
1945	2.56	2.92	3.43	6.31	7.10	6.94	9.47	8.48	7.71	5.00	3.82	2.55	[1]66.29
Mean	2.80	2.90	4.43	5.67	8.33	8.94	11.26	10.22	7.93	5.92	4.26	2.80	75.46

* Pan is located on west side of the lake in the lee of a small hill on the southwest.

[1] Small shrubs and saplings near the pan, insignificant when planted, grew during the period of measurement and doubtless had some effect in reducing the evaporation.

TABLE 179

TEMPERATURE AT LAKE MATHEWS (CAJALCO RESERVOIR), RIVERSIDE COUNTY, CALIFORNIA[1]

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	52	-------	-------	62	62	68	74	75	74	64	62	60	-------
1940	55	53	58	60	66	67	73	74	70	67	59	57	63
1941	52	54	56	56	66	64	74	71	67	64	61	52	61
1942	54	48	56	58	63	68	77	75	70	65	60	55	62
1943	53	55	55	59	65	67	73	74	75	67	61	52	63
1944	50	49	55	56	62	63	70	77	74	67	57	56	61
1945	53	53	51	59	63	67	75	78	75	68	60	53	63
Mean	53	52	55	59	64	66	74	75	72	66	60	55	63

[1] Records by Metropolitan Water District of Southern California.

TABLE 180

WIND MOVEMENT AT LAKE MATHEWS (CAJALCO RESERVOIR), RIVERSIDE COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	-------	1,807	1,534	1,367	738	777	817	1,674	1,504	1,313	957	988	13,476
1940	844	1,098	1,405	1,382	1,963	1,671	1,888	1,847	1,660	1,259	1,350	1,249	17,616
1941	962	907	1,085	831	1,112	1,285	1,319	1,212	1,099	1,055	867	988	12,722
1942	1,033	1,198	1,344	1,256	1,415	1,158	1,210	1,095	1,000	1,207	1,060	1,003	12,979
1943	1,603	1,084	962	1,013	1,248	1,176	1,125	938	751	865	982	1,194	12,941
1944	1,044	1,303	1,277	827	1,000	980	1,041	992	844	856	1,092	768	12,024
1945	846	961	983	978	815	517	630	685	832	778	749	614	9,388
Mean	1,055	1,194	1,227	1,093	1,184	1,081	1,147	1,206	1,098	1,048	1,008	972	13,313

[1] Records by Metropolitan Water District of Southern California.

TABLE 181

EVAPORATION AT LAKE TAHOE, PLACER COUNTY, CALIFORNIA

Station:
Location ------------------ 1,500 feet southwest of Tahoe City and about 600 feet south of dam at outlet of Lake Tahoe. Lat. 39° 10′ N., Long. 120° 10′ W.[1]
Elevation ------------------ 6,230 feet.
Evaporation pan:
Type ------------------ U. S. Weather Bureau pan.
Description ------------------ Diameter 4 feet, depth 10 inches, floating on a raft.
Authority for data ------------------ U. S. Weather Bureau.
Publication reference ------------------ U. S. Weather Bureau Climatological Data (41).
Meteorologic data ------------------ Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	June to Sept., incl.
1919	-------	-------	-------	2.50	3.64	5.40	6.90	6.27	6.04	4.32	3.21	-------	24.61
1920	-------	-------	-------	-------	4.88	3.81	6.22	7.09	4.69	2.58	-------	-------	21.81
1921	-------	-------	-------	2.94	3.60	5.32	5.69	6.24	4.59	2.96	2.30	-------	21.84
1922	-------	-------	-------	-------	3.62	4.48	5.33	4.47	3.24	3.33	2.04	-------	17.52
1923	-------	-------	3.54	3.43	4.21	2.88	4.56	5.17	3.34	2.04	1.82	1.45	15.95
1924	1.33	1.04	1.40	3.08	5.16	4.91	6.90	6.73	5.28	4.12	-------	-------	23.82
1925	-------	-------	-------	-------	5.03	4.63	4.96	4.71	4.01	3.15	-------	-------	18.31
1926	-------	-------	-------	3.26	4.53	4.87	5.44	7.33	6.04	3.24	-------	-------	23.68
1927	-------	-------	-------	-------	4.00	5.61	7.81	8.07	5.51	4.18	-------	-------	27.00
1928	-------	-------	-------	-------	4.21	5.61	6.11	7.42	6.59	2.36	-------	-------	25.73
1929	-------	-------	-------	-------	5.72	5.03	7.82	7.70	4.99	2.91	-------	-------	25.54
1930	-------	-------	-------	-------	3.99	7.31	7.50	6.12	4.13	-------	-------	-------	25.06
1931	-------	-------	-------	-------	4.00	4.91	7.26	7.07	4.45	2.55	-------	-------	23.69
1932	-------	-------	-------	-------	3.46	4.06	5.75	5.69	3.88	2.17	-------	-------	19.38
1933	-------	-------	-------	-------	-------	4.83	6.31	6.17	4.72	2.66	-------	-------	22.03
1934	-------	-------	-------	-------	4.05	3.49	6.16	5.97	4.74	1.98	-------	-------	20.36
1935	-------	-------	-------	-------	-------	5.07	5.28	6.07	5.03	-------	-------	-------	21.45
1936	-------	-------	-------	-------	3.69	3.97	5.06	5.28	3.64	2.08	-------	-------	17.95
1937	-------	-------	-------	-------	4.03	3.88	4.53	4.93	3.55	1.67	-------	-------	16.89
1938	-------	-------	-------	-------	-------	3.63	3.72	4.45	3.08	-------	-------	-------	14.88
1939	-------	-------	-------	-------	3.82	4.19	5.13	5.45	3.08	1.18	-------	-------	17.85
1940	-------	-------	-------	-------	3.59	3.81	4.33	4.69	2.66	1.26	-------	-------	15.49
1941	-------	-------	-------	-------	2.59	2.88	3.67	3.64	2.94	1.36	-------	-------	13.13
1942	-------	-------	-------	-------	-------	3.86	4.66	4.82	3.07	1.40	-------	-------	16.41
1943	-------	-------	-------	-------	3.53	3.61	4.54	5.40	3.48	-------	-------	-------	17.03
1944	-------	-------	-------	-------	3.09	2.81	4.42	4.82	3.33	-------	-------	-------	15.38
1945	-------	-------	-------	-------	2.51	3.27	4.63	4.72	3.58	1.48	-------	-------	16.20
Mean	-------	-------	-------	-------	3.95	4.38	5.58	5.80	4.21	2.53	-------	-------	19.97

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[1] Land near station slopes east on about a 10 percent grade. Station is near mouth of Truckee River. High peaks of Sierra Nevada lie to the west of Lake Tahoe. Lake Tahoe, about 12 miles wide and 22 miles long, lies to the east.

TABLE 182

EVAPORATION AT LAKE TAHOE, PLACER COUNTY, CALIFORNIA

Station:
  Location ------------------- Near outlet in Lake Tahoe. Lat. 39° 10′ N., Long. 120° 09′ W.
  Elevation ------------------ 6,225 feet.[1]
Evaporation pan:
  Type ----------------------- Floating pan.
  Description ---------------- Square, 2 x 2 feet, depth 2 feet.
Authority for data ----------- Duryea, Haehl and Gilman, Consulting Engineers, San Francisco.
Publication reference -------- Water Supply Paper No. 300 (30).
Meteorologic data ------------ None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1900	------	------	------	------	------	3.80	4.00	5.15	------	------	------	------	------
1901	0.84	0.70	0.77	1.25	2.42	3.35	4.42	6.50	4.12	2.65	2.09	1.44	30.55
1902	.35	.15	------	------	.30	1.90	3.20	3.20	2.80	------	------	.25	------
1903	.35	------	1.15	1.50	3.05	3.40	1.42	4.36	3.88	2.78	.64	1.18	------
1904	.72	.20	.10	.94	2.70	3.24	4.42	3.82	2.56	1.62	1.62	1.06	23.00
1905	1.33	.95	.98	2.08	1.64	3.12	4.76	4.60	4.38	3.66	1.78	1.58	30.86
1906	.50	.18	.64	.83	1.64	1.49	4.30	3.80	3.52	3.44	.42	------	------
Mean	.68	.51	.88	1.32	2.29	2.90	3.79	4.49	3.48	2.72	1.72	1.32	26.10

[1] Evaporation pan was filled to within one or two inches of the top and water level inside and outside was about the same. Depth of water in which the pan floated was about six feet. Fully exposed to sun and wind about 200 feet offshore. Protected from heavy waves by a float.

TABLE 183

TEMPERATURE AT LAKE TAHOE, PLACER COUNTY, CALIFORNIA[1]

Year	Mean temperature in ° F. (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1920	29	30	30	36	46	52	58	60	53	40	35	28	41
1921	27	29	35	36	43	54	61	60	53	47	38	33	43
1922	22	26	28	33	44	56	63	59	57	44	32	30	41
1923	27	26	33	37	46	48	60	58	54	43	39	29	42
1924	26	36	31	40	52	55	62	60	55	43	34	26	43
1925	29	31	36	39	48	54	62	58	50	43	34	32	43
1926	28	30	38	44	47	59	62	61	52	46	39	27	44
1927	29	29	33	36	43	54	61	60	51	46	37	27	42
1928	28	30	36	38	53	54	62	61	56	45	36	27	44
1929	26	26	34	34	48	51	63	64	53	47	38	36	43
1930	24	32	34	41	42	55	62	61	53	43	35	29	42
1931	27	32	36	43	52	54	66	65	52	46	30	25	44
1932	20	23	34	37	45	55	60	60	57	46	39	23	42
1933	23	23	33	37	39	54	64	62	55	50	36	31	42
1934	30	33	42	46	50	52	61	63	55	46	37	30	45
1935	26	30	27	37	46	56	59	62	58	42	32	29	42
1936	28	28	33	40	47	54	63	62	53	46	37	30	43
1937	16	29	33	36	48	53	62	62	56	46	37	33	42
1938	30	27	28	37	44	55	61	60	60	43	32	32	42
1939	29	25	35	45	48	53	62	64	54	44	38	36	44
1940	30	30	35	40	51	59	60	63	52	46	34	32	44
1941	30	32	35	37	47	52	62	59	49	42	37	30	43
1942	28	25	31	36	41	52	62	62	53	45	35	32	42
1943	29	30	34	42	47	49	61	57	57	45	37	31	43
1944	28	27	31	35	45	49	59	58	55	46	31	30	41
1945	27	28	29	36	44	52	62	60	55	47	33	------	------
Mean	27	29	33	38	46	54	62	61	54	45	35	30	43

[1] Meteorological station located on shore about 200 feet southwest of floating Weather Bureau pan.

TABLE 184

WIND MOVEMENT AT LAKE TAHOE, PLACER COUNTY, CALIFORNIA[1]

Year	Total wind in miles (41)[2]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1921	-------	-------	-------	1,818	1,615	1,106	1,141	1,265	1,378	1,782	1,927	-------	-------
1922	-------	-------	-------	-------	1,146	762	1,149	1,385	330	1,137	395	-------	-------
1923	-------	-------	881	757	1,215	1,587	1,500	1,205	993	1,217	-------	1,512	-------
1924	1,399	1,369	2,315	2,445	2,611	2,483	2,378	2,454	2,364	2,731	2,434	-------	-------
1925	-------	-------	-------	2,275	2,244	2,020	1,832	2,128	2,058	2,094	1,961	1,822	-------
1926	-------	-------	-------	1,668	1,935	1,649	1,936	2,372	2,406	2,484	-------	-------	-------
1927	-------	-------	-------	-------	2,007	2,781	2,695	2,927	3,087	2,766	2,616	3,620	-------
1928	2,742	2,928	2,460	3,123	2,903	3,268	2,815	3,126	2,884	2,888	2,932	3,315	35,384
1929	3,609	3,001	2,781	3,006	3,404	2,716	3,008	3,196	3,011	3,612	3,329	2,789	37,462
1930	2,873	2,431	2,783	2,737	3,478	2,936	2,281	-------	-------	-------	-------	-------	-------
1931	-------	-------	-------	-------	953	1,174	1,009	1,072	1,071	1,029	1,315	1,183	-------
1932	1,024	624	1,235	1,492	1,010	867	799	627	359	689	993	1,516	11,235
1933	1,445	1,753	1,723	1,424	1,630	1,315	997	1,012	1,068	825	1,248	1,040	15,480
1934	1,205	882	1,082	1,019	1,086	938	1,193	1,022	986	891	944	1,634	12,882
1935	1,355	1,378	1,613	1,394	1,445	991	961	949	971	1,126	1,459	1,294	14,936
1936	1,431	1,149	1,522	1,334	1,177	991	849	888	831	1,099	1,360	1,429	14,060
1937	1,903	1,185	1,280	1,641	1,083	877	432	478	547	675	1,104	1,214	12,419
1938	899	1,070	1,025	1,131	943	691	326	368	257	384	1,279	1,129	9,502
1939	1,601	1,856	1,472	1,414	1,017	886	704	593	429	399	891	1,342	12,604
1940	857	1,037	1,421	1,214	647	484	450	409	491	346	1,310	1,017	9,683
1941	1,040	744	1,069	1,385	949	414	254	246	519	697	793	1,176	9,286
1942	749	1,363	1,482	1,390	1,082	764	427	419	-------	270	1,326	1,436	-------
1943	1,599	1,060	1,045	1,620	902	767	473	764	305	566	1,009	1,726	11,836
1944	1,103	1,548	1,820	1,245	441	478	238	286	198	178	1,255	703	9,493
1945	872	1,344	1,478	1,620	636	695	444	266	488	597	1,245	996	10,681
Mean	1,539	1,484	1,604	1,689	1,502	1,346	1,212	1,227	1,175	1,270	1,506	1,595	17,149

[1] Meteorological station located on shore about 200 feet southwest of floating Weather Bureau pan.
[2] Anemometer cups set 10 inches above rim of Weather Bureau pan on a float.

TABLE 185

EVAPORATION AT LAKE WOHLFORD, SAN DIEGO COUNTY, CALIFORNIA

Station:
Location ____________________On Bear Valley Creek, tributary of Escondido Creek. Lat. 33° 10′ N., Long. 117° 00′ W.
Elevation ____________________1,510 feet.
Evaporation pan:
Type ____________________U. S. Weather Bureau pan.
Description ____________________Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data____________________Escondido Mutual Water Company.
Publication reference ____________________None.
Meteorologic data ____________________None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1941	2.06	2.33	3.99	3.44	5.92	6.71	7.97	7.43	6.16	4.43	3.83	1.89	56.16
1942	2.65	2.79	4.37	3.61	6.32	7.52	9.60	8.49	6.57	4.79	3.63	2.66	63.00
1943	2.63	3.23	3.27	4.34	6.61	7.38	8.79	8.35	7.40	5.01	4.71	2.41	64.13
1944	2.21	2.08	4.37	4.51	5.55	5.96	8.49	9.19	6.91	5.17	2.26	2.69	59.39
1945	2.08	2.16	3.32	4.88	5.45	6.21	8.73	7.17	6.65	4.70	3.71	2.26	57.32
Mean	2.33	2.52	3.86	4.16	5.97	6.76	8.71	8.12	6.74	4.82	3.63	2.38	60.00

TABLE 186

EVAPORATION, TEMPERATURE, AND WIND MOVEMENT AT LITTLE BEAR VALLEY (LAKE ARROWHEAD), SAN BERNARDINO COUNTY, CALIFORNIA

Station:
  Location ------------------ At gate house of the Arrowhead Reservoir Company at Little Bear Valley. Lat. 34° 16′ N., Long. 117° 11′ W.
  Elevation ------------------ 5,160 feet.
Evaporation pan:
  Type ---------------------- Floating pan.
  Description ---------------- A 3 foot pan floating in a concrete basin containing one foot of water.
Authority for data------------ Arrowhead Reservoir Company.
Publication reference --------- Unpublished report of Sub-Committee for Collection of Data on Evaporation from Reservoirs (10).
Meteorologic data ------------ Temperature, wind.

Month	Evaporation in inches				Mean temperature in °F.				Total wind in miles			
	1895	1896	1897	Mean	1895	1896	1897	Mean	1895	1896	1897	Mean
January	-------	0.09	0.57	0.33	-------	42	35	38	-------	2,848	4,342	3,595
February	-------	0.81	0.24	0.52	-------	43	32	38	-------	2,956	3,422	3,189
March	1.12	0.94	-------	1.03	42	42	33	39	4,787	4,546	5,448	4,927
April	1.84	3.39	3.01	2.75	49	42	51	47	4,207	6,112	2,867	4,395
May	5.30	2.86	4.75	4.30	55	52	56	54	3,723	3,953	3,986	3,887
June	6.60	6.50	-------	6.55	62	64	-------	63	3,589	4,727	-------	4,158
July	6.30	5.04	-------	5.67	64	68	-------	66	2,324	4,465	-------	3,394
August	6.20	5.50	-------	5.85	66	66	-------	66	3,032	4,061	-------	3,546
September	5.05	4.61	-------	4.83	62	59	-------	60	1,790	3,683	-------	2,736
October	2.80	4.05	-------	3.42	54	54	-------	54	2,120	3,470	-------	2,795
November	1.20	1.28	-------	1.24	39	44	-------	42	3,070	3,950	-------	3,510
December	0.34	1.23	-------	0.78	39	42	-------	40	2,217	2,619	-------	2,418
Annual	-------	36.30	-------	37.27	-------	52	-------	51	-------	47,380	-------	42.550

TABLE 187

EVAPORATION AT LODI, SAN JOAQUIN COUNTY, CALIFORNIA

Station:
  Location ------------------ Three-quarters mile northeast of Lodi Post Office at edge of Lawrence Park. Lat. 38° 08′ N., Long. 121° 16′ W.[1]
  Elevation ------------------ 60 feet.
Evaporation pan:
  Type ---------------------- U. S. Weather Bureau pan.
  Description ---------------- Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data ------------- U. S. Weather Bureau.
Publication reference ---------- U. S. Weather Bureau Climatological Data (41).
Meteorologic data ------------- Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	0.80	1.45	3.79	7.30	10.71	10.04	13.94	11.20	7.68	4.18	2.00	0.88	73.97
1932	1.21	1.86	4.41	5.77	8.64	10.87	11.84	10.30	7.70	6.00	3.31	1.30	73.21
1933	0.92	2.29	4.04	6.78	8.52	11.04	13.38	11.70	8.01	5.72	2.18	0.71	75.29
1934	0.97	1.50	3.97	6.93	8.96	9.52	12.72	11.12	7.98	5.00	1.76	1.33	71.76
1935	1.16	1.72	3.36	4.25	8.19	10.76	11.37	10.57	7.49	4.73	2.17	-------	-------
1936	1.26	1.43	3.71	5.26	9.27	10.31	12.48	11.62	8.51	4.79	2.01	0.81	71.46
1937	1.03	1.67	2.93	5.64	-------	-------	12.50	11.68	8.31	4.74	1.86	0.78	-------
1938	0.78	1.77	3.14	4.27	8.11	10.42	11.14	9.99	7.27	3.70	2.38	0.66	63.63
1939	0.97	2.79	3.22	7.26	9.64	12.72	13.16	11.79	8.62	4.70	2.51	1.23	78.61
1940	1.00	1.97	3.72	5.34	9.05	11.41	11.41	9.91	6.83	4.04	1.92	1.37	67.97
1941	0.81	1.12	3.40	4.86	8.63	10.41	11.08	8.50	7.31	4.27	1.26	1.22	62.87
1942	0.89	1.79	3.66	3.96	7.43	10.86	11.57	8.32	6.96	4.34	1.90	0.68	62.36
1943	1.13	1.39	3.26	5.23	10.12	9.93	11.67	9.42	7.76	4.04	1.93	1.79	67.67
1944	1.20	2.63	4.59	5.38	8.57	10.24	10.47	10.08	8.46	3.84	1.20	0.67	67.33
1945	0.70	2.06	2.74	7.04	8.05	10.76	11.33	9.74	8.25	3.94	1.25	1.27	67.13
Mean	0.99	1.83	3.60	5.68	8.85	10.66	12.00	10.40	7.81	4.54	1.98	1.05	69.39

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[1] The Mokelumne River is one half mile to the north; surrounding county is generally level but slopes gently to the east.

TABLE 188

TEMPERATURE AT LODI, SAN JOAQUIN COUNTY, CALIFORNIA

Year	Mean temperature in °F. (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	46	52	55	62	68	67	77	72	64	58	49	43	59
1932	42	46	54	56	63	69	70	69	70	60	55	40	58
1933	41	45	53	57	58	66	75	72	64	64	51	44	58
1934	44	51	58	61	65	68	71	72	68	61	53	46	60
1935	45	48	48	57	60	70	71	72	67	59	47	45	57
1936	47	48	52	57	64	69	74	72	68	62	50	42	59
1937	38	48	-------	-------	-------	-------	76	74	69	63	54	47	-------
1938	44	50	51	57	65	71	74	72	71	60	50	47	59
1939	42	45	52	61	64	70	72	71	72	63	54	49	60
1940	48	53	56	59	66	72	71	71	66	62	50	49	60
1941	49	53	56	56	64	68	73	69	66	59	53	49	60
1942	46	48	52	57	60	68	73	71	68	62	52	46	59
1943	46	51	54	58	66	69	72	70	71	61	53	48	60
1944	47	48	52	55	64	66	69	70	70	63	50	47	58
1945	44	51	50	58	60	70	74	71	70	63	51	-------	-------
Mean	45	49	53	58	63	69	73	71	68	61	51	46	59

TABLE 189

WIND MOVEMENT AT LODI, SAN JOAQUIN COUNTY, CALIFORNIA

Year	Total wind in miles (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annua
1931	1,606	1,111	1,768	1,186	2,036	2,309	1,917	2,171	1,708	1,214	1,347	1,915	20,288
1932	1,665	1,455	1,798	1,980	2,003	1,831	1,949	1,745	1,337	1,712	817	1,236	19,528
1933	2,022	1,551	1,651	1,963	-------	2,048	-------	-------	1,716	1,010	-------	1,092	-------
1934	916	785	745	1,295	1,636	1,895	-------	-------	1,441	1,352	1,313	1,662	-------
1935	1,894	1,324	2,107	1,492	1,788	1,407	1,557	1,409	1,299	1,046	632	705	16,660
1936	1,572	1,689	1,497	1,596	2,236	2,113	1,729	1,624	1,284	909	417	932	17,598
1937	1,854	1,416	1,416	1,825	-------	-------	-------	1,768	1,598	1,149	852	1,043	-------
1938	1,359	1,889	1,560	707	1,040	1,093	1,086	946	626	801	1,008	904	13,019
1939	1,152	1,897	1,658	1,611	-------	-------	-------	-------	-------	-------	-------	-------	-------
1940	-------	-------	-------	-------	-------	2,371	2,037	1,798	1,688	879	859	2,079	-------
1941	2,211	2,045	1,872	1,862	2,689	2,609	1,888	1,838	1,383	1,064	820	2,651	22,932
1942	1,696	1,788	1,563	1,653	2,346	2,242	1,895	1,567	1,665	1,206	1,313	1,314	20,248
1943	1,664	708	1,193	1,682	2,146	2,091	2,229	1,672	1,552	1,208	670	1,346	18,161
1944	1,331	1,646	1,592	2,064	1,904	2,027	1,696	1,050	1,118	687	761	441	16,317
1945	547	1,269	1,197	1,476	2,171	2,129	1,709	1,529	1,422	1,283	754	1,114	16,600
Mean	1,535	1,470	1,544	1,599	2,000	2,013	1,790	1,593	1,417	1,108	889	1,317	18,275

TABLE 190

EVAPORATION NEAR LONG BEACH, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ------------------Near Long Beach. Lat. 33° 47′ N., Long. 118° 12′ W.
  Elevation ------------------30 feet.
Evaporation pan:
  Type ----------------------Ground pan.
  Description ----------------Diameter 6 feet, depth 3 feet, set 2.75 feet in the ground.
Authority for data------------San Gabriel Valley Protective Association.
Publication reference ---------Calif. Dept. of Pub. Wks. Bull No. 44 (6).
Meteorologic data ------------Temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1929	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	2.15	-------
1930	1.08	1.87	2.44	4.00	5.11	5.51	7.30	6.80	5.54	4.93	3.61	2.40	50.59
1931	1.66	2.02	4.63	5.16	5.48	6.79	7.79	6.74	5.89	4.58	2.98	1.08	54.80
Mean	1.37	1.94	3.54	4.58	5.30	6.15	7.54	6.77	5.72	4.76	3.30	1.88	52.85

TABLE 191

TEMPERATURE AT LONG BEACH, LOS ANGELES COUNTY, CALIFORNIA

Year	Mean temperature in °F. (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1929	53	52	55	58	65	67	71	74	69	67	62	60	63
1930	54	58	59	62	61	66	71	71	67	64	62	54	62
1931	56	58	62	64	67	69	76	74	65	66	57	52	64
Mean	54	56	59	61	64	67	73	73	67	66	60	55	63

TABLE 192

EVAPORATION AT LONG VALLEY RESERVOIR (LAKE CROWLEY), MONO COUNTY, CALIFORNIA

Station:
  Location ------------------Near lower end of reservoir. Lat. 37° 35′ N., Long. 118° 42′ W.[1]
  Elevation ------------------6,782 feet.
Evaporation pan:
  Type ------------------Ground pan.
  Description ------------------Square, 3 x 3 feet, depth 18 inches, set 14 inches in ground.
Authority for data------------------Los Angeles Dept. of Water and Power.
Publication reference ------------------None.
Meteorologic data ------------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total May to Oct.
1944	-------	-------	-------	-------	-------	-------	8.98	7.89	6.24	3.45	-------	-------	-------
1945	-------	-------	-------	-------	4.45	6.97	7.33	6.38	5.39	2.85	-------	-------	-------
1946	-------	-------	-------	-------	6.78	8.53	8.22	7.39	-------	-------	-------	-------	-------
Mean	-------	-------	-------	-------	5.62	7.75	8.18	7.22	5.82	3.15	-------	-------	37.74

[1] This pan was moved about one-quarter mile to an arm of the reservoir April 1, 1946.

TABLE 193

EVAPORATION AT LONG VALLEY RESERVOIR (LAKE CROWLEY), MONO COUNTY, CALIFORNIA

Station:
  Location ------------------On Owens River near confluence with Crooked Creek. Lat. 37° 35′ N., Long. 118° 42′ W.[1]
  Elevation ------------------6,782 feet.
Evaporation pan:
  Type ------------------Floating pan.
  Description ------------------Square, 3 x 3 feet, depth 18 inches, floating in reservoir.
Authority for data------------------Los Angeles Dept. of Water and Power.
Publication reference ------------------None.
Meteorologic data ------------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total May to Nov.
1942	-------	-------	-------	-------	-------	10.50	12.06	10.68	8.17	5.85	4.09	-------	-------
1943	-------	-------	-------	-------	9.37	-------	10.49	11.21	9.77	-------	2.78	-------	-------
1944	-------	-------	-------	-------	6.70	7.80	10.23	10.33	7.82	5.26	-------	-------	-------
1945	-------	-------	-------	-------	4.44	7.37	8.67	8.36	6.99	4.29	-------	-------	-------
1946	-------	-------	-------	-------	7.09	8.85	8.42	7.68	-------	-------	-------	-------	-------
Mean	-------	-------	-------	-------	6.90	8.63	9.97	9.65	8.19	5.13	3.44	-------	48.47

[1] This pan was moved about one-quarter mile to an arm of the reservoir April 1, 1946.

TABLE 194

TEMPERATURE AT LONG VALLEY RESERVOIR (LAKE CROWLEY), MONO COUNTY, CALIFORNIA

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1941	-------	-------	-------	-------	50	54	62	59	50	41	37	29	-------
1942	18	18	25	40	46	56	65	62	52	45	37	33	41
1943	29	26	37	44	49	51	63	60	57	45	36	29	44
1944	21	20	26	38	48	51	61	61	55	44	29	22	40
1945	23	26	25	39	47	55	65	61	56	46	35	27	42
1946	22	23	34	42	50	54	63	-------	-------	-------	-------	-------	-------
Mean	23	23	29	41	48	54	63	61	54	44	35	28	42

TABLE 195

WIND MOVEMENT AT LONG VALLEY RESERVOIR (LAKE CROWLEY), MONO COUNTY, CALIFORNIA

Year	Mean wind in miles per hour												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1941	-------	-------	-------	-------	-------	5.4	4.7	4.8	5.8	4.9	3.3	3.0	-------
1942	-------	4.4	4.8	8.6	9.9	7.1	6.0	5.4	4.3	4.6	4.1	3.1	-------
1943	2.8	2.6	3.8	3.8	3.5	3.5	2.8	2.0	-------	-------	1.3	1.5	-------
1944	1.4	1.9	1.9	3.5	3.2	6.6	4.8	4.1	4.3	4.4	4.0	3.7	3.6
1945	3.1	5.5	4.7	6.9	8.6	5.5	4.7	4.2	4.6	4.4	5.2	3.7	5.1
1946	4.5	6.1	5.0	4.0	4.9	4.9	4.4	-------	-------	-------	-------	-------	-------
Mean	3.0	4.1	4.0	5.4	6.0	5.5	4.6	4.1	4.8	4.6	3.6	3.0	4.4

TABLE 196

EVAPORATION AT LOWER FRANKLIN RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:

Location	In Franklin Canyon about 4 miles west of Hollywood. Lat. 34° 06′ N., Long. 118° 25′ W.
Elevation	575 feet.

Evaporation pan:

Type	Floating pan.
Description	Square, 30 x 30 inches, depth 18 inches.
Authority for data	Los Angeles Dept. of Water and Power.
Publication reference	None.
Meteorologic data	Water temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	2.40	2.00	2.18	3.56	4.43	5.04	5.88	6.07	6.12	4.93	3.22	2.62	48.45
1940	.72	.88	2.48	3.17	4.17	4.28	6.26	5.86	5.61	4.84	4.40	1.59	44.26
1941	1.51	3.63	2.07	4.41	4.85	4.69	6.03	5.09	5.22	3.88	3.39	1.41	46.18
1942	1.97	1.87	3.35	2.29	4.85	4.42	5.96	5.66	5.01	4.12	3.59	2.24	45.33
1943	2.35	2.29	2.08	3.21	4.89	5.08	5.68	6.10	5.66	4.58	4.14	1.24	47.30
1944	2.24	2.13	3.59	3.43	3.60	4.22	4.96	5.89	4.65	3.69	3.11	3.01	44.52
1945	2.10	1.71	2.45	3.61	4.49	3.71	5.17	6.38	5.98	4.23	4.07	2.43	46.33
Mean	1.90	2.07	2.60	3.38	4.47	4.49	5.71	5.86	5.46	4.32	3.70	2.08	46.05

TABLE 197

WATER TEMPERATURES IN LOWER FRANKLIN RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA[1]

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	53	50	54	62	66	71	76	78	75	69	62	58	64
1940	54	55	58	63	69	72	77	77	75	70	62	56	66
1941	54	55	60	64	69	74	78	77	74	67	63	55	66
1942	51	53	57	61	66	72	79	79	73	69	62	55	65
1943	51	53	58	63	68	70	75	78	74	70	61	54	65
1944	50	51	55	60	64	70	73	78	76	69	62	55	64
1945	51	52	54	60	68	70	77	80	78	70	61	53	64
Mean	52	53	57	62	67	71	76	78	75	69	62	55	65

[1] Water temperature records are the results of spot readings taken at irregular intervals and while they do not necessarily represent average water temperatures they probably closely approximate them.

TABLE 198

EVAPORATION AT LOWER OTAY RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ------------------ On Otay River southeast of San Diego. Lat. 32° 37′ N., Long. 116° 56′ W.
  Elevation ------------------ 490 feet.
Evaporation pan:
  Type ------------------ Ground pan.
  Description ------------------ Square, 3 x 3 feet, depth 18 inches, set 15 inches in ground.
Authority for data ------------------ San Diego Water Department, Division of Water Development and Conservation.
Publication reference ------------------ None.
Meteorologic data ------------------ None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1927	1.36	2.69	3.29	4.55	5.95	7.08	8.61	8.57	6.62	4.25	2.05	1.87	56.89
1928	2.39	2.86	4.41	6.23	5.55	7.55	9.25	8.83	6.62	3.46	3.13	2.07	62.35
1939	1.78	2.60	3.03	4.57	7.42	7.68	9.41	8.48	6.02	5.64	4.17	2.80	63.60
1930	1.18	2.80	3.37	5.45	5.64	6.79	8.93	8.27	6.88	6.00	4.16	2.53	62.00
1931	1.94	-------	4.68	5.00	6.67	8.26	9.28	7.25	7.41	5.20	2.53	1.33	-------
1932	1.17	1.47	3.81	5.54	6.57	7.27	8.17	7.42	5.64	4.39	3.22	1.32	55.99
1933	1.23	2.32	4.29	4.56	5.21	7.10	7.99	7.42	5.20	4.00	3.60	1.67	54.59
1934	2.80	2.32	3.89	5.68	7.82	6.68	8.39	7.94	7.03	4.83	4.45	2.50	64.33
1935	1.60	-------	3.18	4.59	6.13	7.99	8.57	7.64	6.48	5.30	3.76	2.52	-------
1936	2.46	1.99	3.96	5.43	7.06	8.07	8.57	7.59	6.48	4.62	3.13	2.52	61.88
1937	2.18	2.90	3.73	5.49	5.73	7.86	8.45	7.95	6.93	4.97	3.13	2.50	61.82
1938	2.89	2.22	3.80	5.16	6.08	7.06	7.77	7.06	-------	4.17	4.08	2.41	-------
1939	1.58	2.69	2.41	4.28	6.08	7.02	7.42	6.97	4.43	4.48	2.68	1.96	52.00
1940	1.41	2.01	3.86	4.90	6.44	6.88	7.95	7.15	5.11	4.11	3.46	1.88	55.16
1941	1.74	2.01	3.33	3.79	5.78	6.66	6.80	6.53	4.94	3.64	2.79	1.56	49.57
1942	1.88	2.14	3.32	3.43	6.04	6.70	7.64	6.57	5.15	4.18	2.88	1.90	51.83
1943	1.87	2.39	2.69	3.94	6.13	6.49	8.13	7.06	5.60	4.15	3.86	1.79	54.10
1944	2.00	1.76	3.95	4.91	4.94	5.85	7.46	6.84	5.13	3.62	1.93	2.14	50.53
1945	1.45	1.98	2.50	4.42	5.64	5.46	6.48	5.55	5.02	4.00	2.75	1.36	46.61
Mean	1.84	2.30	3.55	4.84	6.15	7.08	8.17	7.42	5.93	4.47	3.25	2.03	57.03

TABLE 199

EVAPORATION AT LOWER OTAY RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ____________________On Otay River southeast of San Diego. Lat. 32° 37′ N., Long. 116° 56′ W.
  Elevation __________________490 feet.
Evaporation pan:
  Type _______________________Floating pan.
  Description ________________Square, 3 x 3 feet, depth 18 inches.
Authority for data_____________San Diego Water Department, Division of Water Development and Conservation.
Publication reference _________None.
Meteorologic data _____________None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1927	1.40	2.85	3.69	4.59	6.57	6.95	8.84	8.79	6.79	5.22	3.43	2.54	61.66
1928	2.48	3.04	4.15	5.74	5.33	6.93	8.13	8.08	6.39	3.60	3.13	2.02	59.02
1929	1.82	2.52	3.07	4.52	7.24	7.06	8.30	7.73	5.13	5.68	4.13	2.84	60.04
1930	1.28	2.71	3.28	5.14	5.11	6.13	7.87	7.07	6.17	5.24	3.93	2.36	56.29
1931	2.11	-------	4.19	4.33	5.87	7.06	8.04	6.85	7.02	4.84	2.66	1.69	-------
1932	1.66	1.82	3.99	5.67	6.93	7.23	8.48	8.08	6.79	5.42	4.07	2.39	62.53
1933	1.63	2.89	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
1934	-------	-------	-------	-------	-------	-------	-------	-------	6.97	4.97	1.95	2.50	-------
1935	1.46	-------	3.18	3.96	5.46	7.10	7.24	6.80	6.44	5.48	3.09	2.21	-------
1936	2.37	2.39	3.78	4.76	6.26	7.05	7.50	7.05	6.21	4.40	3.13	2.78	57.68
1937	2.31	2.72	3.69	5.00	5.25	7.15	7.79	7.37	6.17	4.44	2.77	2.14	56.80
1938	2.40	-------	3.76	4.53	5.64	6.40	7.32	6.88	3.20	-------	4.44	2.41	-------
1939	2.29	2.69	2.54	4.32	6.08	6.70	7.42	7.06	5.01	4.93	2.95	2.36	54.35
1940	1.81	2.19	3.91	4.72	6.70	6.84	7.55	7.33	5.42	4.65	3.64	1.84	56.60
1941	1.92	1.74	3.95	3.88	6.27	7.59	7.74	7.46	6.19	4.52	3.28	1.79	56.33
1942	2.42	2.50	3.63	4.27	6.70	7.15	7.73	7.33	6.04	5.34	3.46	2.30	58.87
1943	2.27	2.17	3.05	4.38	6.70	6.93	7.55	7.59	6.40	5.18	4.39	1.84	58.45
1944	2.35	1.27	4.31	5.39	5.61	6.43	7.86	7.28	6.10	4.28	2.78	2.54	56.20
1945	1.98	2.16	2.77	4.76	7.02	6.63	7.19	6.53	6.13	4.80	3.68	2.12	55.77
Mean	2.00	2.38	3.58	4.70	6.16	6.90	7.80	7.37	6.03	4.88	3.38	2.26	57.44

TABLE 200

EVAPORATION AT LOWER SAN FERNANDO RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ------------------In northern part of San Fernando Valley. Lat. 34° 17′ N., Long. 118° 29′ W.
  Elevation ----------------Approx. 1,140 feet.
Evaporation pan:
  Type ----------------------U. S. Weather Bureau pan.
  Description ---------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data-------------Los Angeles Dept. of Water and Power.
Publication reference ---------Calif. Dept. of Pub. Wks. Bull. No. 44 (6).
Meteorologic data ------------Temperature, wind.*

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931---	9.06	7.54	11.62	8.72	7.51	9.45	11.71	9.76	9.33	8.07	6.23	[1]6.76	105.76
1932---	8.23	[1]6.42	8.48	9.37	4.49	6.30	9.72	10.32	8.13	8.64	13.02	6.02	99.14
1933---	7.13	8.20	8.09	6.57	9.35	8.63	10.52	9.53	6.62	7.95	13.21	7.70	103.50
1934---	8.60	3.41	8.28	8.18	9.02	5.99	10.61	8.96	8.26	7.16	5.20	5.99	89.66
1935---	4.75	5.60	4.90	5.27	6.22	7.76	10.07	9.97	7.47	8.54	6.50	5.84	82.89
1936---	5.98	2.27	5.90	5.92	8.22	9.82	9.78	9.78	8.86	6.83	10.20	6.21	89.77
1937---	3.26	5.91	6.34	8.25	6.11	8.11	10.50	9.19	8.18	7.20	3.96	6.51	83.52
1938---	7.09	2.50	4.32	6.15	7.56	6.91	9.49	9.40	8.52	6.01	9.88	8.16	85.99
1939---	6.26	5.18	4.61	6.87	7.64	9.00	10.01	9.85	10.37	9.82	6.84	7.28	93.73
1940---	2.68	5.03	6.66	6.85	8.07	7.72	10.48	8.50	7.59	8.13	7.93	5.33	84.97
1941---	3.54	.91	4.90	5.06	9.04	6.85	9.34	8.20	7.63	7.08	8.13	6.09	76.77
1942---	5.84	4.86	7.55	4.74	7.99	7.99	11.15	9.12	8.33	7.31	7.69	5.64	88.21
1943---	6.05	6.50	3.01	5.51	8.24	8.66	9.77	9.42	9.29	6.74	8.15	4.46	85.80
1944---	5.97	2.52	8.59	6.98	6.05	6.48	8.88	10.50	7.92	5.68	4.41	6.81	80.79
1945---	5.43	4.67	4.77	7.30	7.72	6.17	9.63	9.41	8.70	6.98	7.08	5.44	83.30
Mean--	5.99	4.77	6.53	6.78	7.55	7.72	10.11	9.46	8.35	7.48	7.90	6.28	88.92

* High winds appear to be a contributing factor in causing high evaporation during winter months.

[1] Estimated.

TABLE 201

TEMPERATURE AT LOWER SAN FERNANDO RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA*

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931---	------	------	------	------	------	------	79	79	74	70	59	53	------
1932---	50	55	62	62	64	69	74	75	72	69	70	53	65
1933---	53	54	59	58	61	68	75	74	70	72	68	57	64
1934---	60	57	67	66	68	66	78	76	74	69	62	59	67
1935---	54	57	53	59	62	69	74	78	74	65	60	58	64
1936---	58	53	60	61	67	72	78	77	75	69	68	58	66
1937---	43	53	57	61	66	70	77	76	74	70	61	58	64
1938---	57	52	53	58	65	68	73	76	76	67	60	58	64
1939---	55	49	55	64	63	68	74	76	75	71	64	63	65
1940---	55	55	59	61	66	69	73	74	70	69	63	58	64
1941---	53	54	56	56	69	66	75	75	69	67	63	55	63
1942---	57	52	58	58	63	68	77	75	70	66	63	58	64
1943---	55	56	57	62	67	68	74	74	76	68	65	54	65
1944---	54	48	58	[1]59	[1]63	66	[1]69	[1]75	72	66	[1]58	[1]58	62
1945---	55	54	52	59	62	65	75	77	72	65	59	53	62
Mean--	54	54	58	60	65	68	75	76	73	68	63	57	64

* Records by Los Angeles Dept. of Water and Power.

[1] Estimated.

TABLE 202

WIND MOVEMENT AT LOWER SAN FERNANDO RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA[1]

Year	Mean wind in miles per hour												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	2.58	2.78	4.30	5.23	7.11	9.18	-------
1932	9.30	8.79	6.70	6.77	4.33	3.51	2.80	2.47	2.86	6.71	10.86	8.84	6.16
1933	9.25	10.15	6.17	5.21	7.09	3.12	3.08	-------	-------	-------	-------	-------	-------
	No records available												
1942	-------	-------	7.10	4.20	4.50	3.00	2.70	2.60	3.10	5.30	7.70	7.10	-------
1943	8.96	8.10	4.06	3.77	4.52	3.69	3.01	2.57	2.83	3.81	8.28	8.43	5.17
1944	9.60	7.30	8.80	5.40	3.30	3.40	2.70	2.90	3.70	2.90	6.90	8.80	5.48
1945	8.61	6.59	6.21	5.68	7.19	3.17	2.69	2.61	3.60	4.40	8.79	8.19	5.64
Mean	9.14	8.19	6.51	5.17	5.16	3.32	2.79	2.66	3.40	4.72	8.27	8.42	5.65

[1] Anemometer about 7 feet above ground surface. Records by Los Angeles Dept. of Water and Power.

TABLE 203

WATER TEMPERATURES IN LOWER SAN FERNANDO RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA[1]

Year	Mean water temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	82	80	75	69	58	47	-------
1932	46	47	55	61	66	72	76	75	74	68	59	48	62

[1] Records by Los Angeles Dept. of Water and Power.

TABLE 204

EVAPORATION AT MALLARD RESERVOIR, CONTRA COSTA COUNTY, CALIFORNIA

Station:
  Location ____________________ At Mallard Reservoir, 2½ miles north of Concord. Lat. 38° 00′ N., Long. 122° 02′ W.[1]
  Elevation __________________ Approx. 30 feet.
Evaporation pan:
  Type _______________________ Floating pan.
  Description ________________ Diameter 3 feet 5 inches, depth 18 inches.
Authority for data ____________ California Water Service Company.
Publication reference _________ None.
Meteorologic data _____________ None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	-------	-------	-------	-------	-------	-------	8.58	6.01	5.39	3.41	1.74	-------
1931	-------	3.07	5.39	7.58	9.08	10.18	11.87	9.81	6.85	4.57	2.56	-------	-------
1932	.86	1.37	3.48	5.24	6.20	8.70	10.38	9.30	7.27	5.49	2.73	.87	61.89
1933	-------	2.20	2.86	5.53	6.45	8.68	10.38	8.97	6.74	4.61	3.33	-------	-------
1934	.96	1.02	3.75	6.26	7.61	7.60	10.06	8.74	7.42	4.40	1.25	1.24	60.31
1935	-------	1.68	2.74	3.79	7.56	9.13	8.11	7.14	5.18	4.12	1.61	.99	-------
1936	.91	-------	3.60	4.20	6.83	7.27	8.85	8.11	6.10	4.08	1.99	.90	-------
1937	.81	.92	1.87	4.49	6.73	6.99	9.13	8.47	6.18	3.78	1.74	1.03	52.14
1938	.72	-------	1.31	3.33	6.19	6.90	8.99	8.37	6.00	3.38	1.80	.83	-------
1939	.75	1.32	1.70	2.70	4.14	6.00	7.36	6.81	5.61	3.81	2.14	1.07	43.41
1940	.80	1.39	2.69	4.26	6.88	7.28	8.11	7.25	4.97	3.63	3.36	1.00	51.62
1941	1.40	1.04	2.80	4.15	6.09	7.40	7.59	6.47	5.72	3.41	1.45	1.06	48.58
1942	.34	1.54	3.10	3.10	5.98	7.44	8.41	8.18	7.44	3.60	1.66	.84	51.63
1943	.90	1.67	2.39	4.87	-------	-------	-------	-------	-------	-------	-------	-------	-------
1944	-------	1.60	2.72	4.51	5.92	-------	-------	-------	-------	-------	-------	-------	-------
Mean	.84	1.57	2.88	4.57	6.59	7.80	9.10	8.17	6.27	4.17	2.23	1.05	55.24

[1] Pan about half filled with water is protected from wind by the walls of the reservoir.

TABLE 205

EVAPORATION AT MELOLAND EXPERIMENT STATION, UNIVERSITY OF CALIFORNIA, IMPERIAL COUNTY, CALIFORNIA

Station:	
Location	Approx. 5½ miles east of El Centro in Sec. 32, T. 15 S., R. 15 E. S. B. B. and M.
Elevation	Approx. 25 feet below sea level.
Evaporation pan:	
Type	Ground pan.
Description	Diameter 3 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data	University of California College of Agriculture.
Publication reference	None.
Meteorologic data	Temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1914	-------	-------	-------	-------	10.93	11.58	12.28	11.52	9.60	6.48	3.72	2.41	-------
1915	-------	2.85	5.05	6.72	9.03	11.00	13.17	10.84	9.60	6.89	4.64	3.29	-------
1916	-------	3.88	-------	8.31	11.22	-------	11.39	10.35	-------	-------	-------	-------	-------
1917	2.09	3.62	6.16	8.05	10.09	-------	-------	-------	-------	-------	-------	-------	-------
1918	3.88	3.86	-------	-------	8.00	-------	10.40	9.86	-------	-------	-------	-------	-------
Mean	2.98	3.55	5.60	7.69	9.85	11.29	11.81	10.64	9.60	6.68	4.18	2.85	86.72

TABLE 206

TEMPERATURE AT MELOLAND EXPERIMENT STATION, UNIVERSITY OF CALIFORNIA, IMPERIAL COUNTY, CALIFORNIA

Year	Mean temperature in ° F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1914	-------	-------	-------	-------	76	84	92	91	86	73	66	51	-------
1915	53	57	63	70	73	86	90	91	82	75	61	54	71
1916	53	61	67	72	77	86	91	90	85	69	60	51	72
1917	51	58	60	69	72	-------	-------	-------	-------	-------	-------	-------	-------
1918	54	56	64	69	73	90	90	88	-------	-------	-------	-------	-------
Mean	53	58	63	70	74	86	91	90	84	72	62	52	71

TABLE 207

EVAPORATION AT MENDOTA POOL, FRESNO COUNTY, CALIFORNIA

Station:
  Location ------------------At pool near Mendota. Lat. 36° 47′ N., Long. 120° 22′ W.
  Elevation ----------------160 feet.
Evaporation pan:
  Type ---------------------U. S. Weather Bureau pan.
  Description ---------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data-----------California Water Project Authority.
Publication reference ---------Unpublished report (7).
Meteorologic data ------------None.

Week ending	Weekly evaporation	Week ending	Weekly evaporation
1938	Inches	1938	Inches
June 15	----------	September 7	2.52
June 22	2.87	September 14	1.96
June 29	3.07	September 21	1.93
July 6	2.41	September 28	1.27
July 13	2.88	October 5	1.14
July 20	2.92	October 12	.94
July 27	2.94	October 19	1.06
August 3	3.00	October 26	.80
August 10	2.53	November 2	.63
August 17	2.52	November 9	.64
August 24	2.07	November 16	1.56
August 31	2.35	November 23	.42
		Total	44.43

TABLE 208

EVAPORATION AT MISSION BASIN EVAPORATION STATION, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ------------------At Carlsbad Mutual Water Company pumping plant, Mission Basin, San Luis Rey Valley. Lat. 33° 13′ N., Long. 117° 21′ W.
  Elevation ----------------35 feet.
Evaporation pan:
  Type ---------------------U. S. Weather Bureau pan.
  Description ---------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data-----------Div. of Irrig., SCS, U. S. Dept. of Agric.
Publication reference ---------Utilization of the Waters of Lower San Luis Rey Valley, San Diego County, Calif. (32).
Meteorologic data ------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	1.67	3.12	3.03	4.41	6.45	7.16	7.83	5.90	6.07	5.11	2.97	2.16	55.88
1940	1.42	2.34	4.04	5.21	6.56	5.99	7.32	6.94	6.71	4.35	2.87	1.94	55.69
1941	1.40	2.03	3.37	4.13	5.34	5.96	6.87	6.04	5.16	3.27	2.23	1.38	47.18
1942	1.61	2.30	4.02	4.10	6.17	6.24	7.41	6.71	4.95	3.90	2.70	1.86	51.97
1943	2.24	2.52	3.30	3.76	5.93	6.80	6.90	6.59	5.18	4.08	2.99	1.61	51.90
1944	1.48	2.50	3.21	4.90	5.41	5.84	-------	-------	-------	-------	-------	-------	-------
Mean	1.64	2.47	3.50	4.42	5.98	6.33	7.27	6.44	5.61	4.14	2.75	1.79	52.34

TABLE 209

TEMPERATURE AT MISSION BASIN EVAPORATION STATION, SAN DIEGO COUNTY, CALIFORNIA

Year	Mean temperature in ° F. (32)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	-------	-------	-------	-------	63	64	68	69	71	62	58	55	-------
1940	56	55	56	61	62	64	65	67	65	62	55	56	60
1941	54	57	58	57	62	64	66	68	63	60	57	52	60
1942	52	50	52	57	59	64	67	67	63	62	55	51	58
1943	52	55	56	58	61	61	66	68	66	59	55	53	59
Mean	54	54	56	58	61	63	66	68	66	61	56	53	60

TABLE 210

WIND MOVEMENT AT MISSION BASIN EVAPORATION STATION, SAN DIEGO COUNTY, CALIFORNIA[1]

Year	Total wind in miles (32)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1940	-------	-------	-------	1,645	2,004	1,575	1,758	1,672	1,632	1,836	1,147	1,472	-------
1941	998	1,240	1,242	1,027	826	886	846	889	976	1,111	894	963	11,898
1942	886	1,311	1,403	1,611	1,386	1,179	1,124	1,047	1,167	1,109	981	896	14,080
1943	1,414	1,394	1,275	862	976	1,117	961	903	852	955	718	1,018	12,445
1944	883	1,458	1,080	1,762	450	707	-------	-------	-------	-------	-------	-------	-------
Mean	1,040	1,351	1,250	1,381	1,128	1,093	1,172	1,128	1,157	1,253	935	1,087	13,975

[1] Anemometer cups about 6 inches above water surface in evaporation pan.

TABLE 211

EVAPORATION NEAR MONROVIA, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	Near Monrovia. Lat. 34° 07′ N., Long. 118° 00′ W.
Elevation	568 feet.
Evaporation pan:	
Type	Ground pan.
Description	Diameter 6 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data	San Gabriel Valley Protective Association.
Publication reference	Calif. Dept. of Pub. Wks., Bull. No. 44 (6).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1929	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	2.78	1.93	-------
1930	1.39	1.93	2.95	3.86	4.09	5.09	7.02	6.11	4.56	3.55	2.60	1.64	44.79
1931	1.34	2.11	3.71	4.09	4.58	5.81	6.71	5.98	4.94	3.23	1.92	.83	45.25
Mean	1.36	2.02	3.33	3.98	4.34	5.45	6.86	6.04	4.75	3.39	2.43	1.47	45.42

TABLE 212

EVAPORATION AT MORENA RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ------------------On Cottonwood Creek, a tributary of Tia Juana River. Lat. 32° 41′ N., Long. 116° 31′ W.
  Elevation -----------------3,045 feet.
Evaporation pan:
  Type ----------------------Ground pan.
  Description ---------------Square, 3 x 3 feet, depth 18 inches, set 15 inches in ground.
Authority for data-------------San Diego Water Department, Division of Water Development and Conservation.
Publication reference ---------None.
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935---	2.51	4.48	5.70	5.56	7.11	10.15	11.38	11.67	9.28	6.90	3.83	-------	-------
1936---	-------	-------	6.27	6.02	8.78	12.78	13.25	11.49	9.89	8.43	5.49	5.32	-------
1937---	-------	-------	2.72	5.08	7.62	9.93	11.05	11.64	9.93	7.03	4.04	3.24	-------
1938---	-------	2.18	-------	5.19	7.01	9.05	8.57	9.24	8.57	5.64	4.94	2.61	-------
1939---	2.90	-------	4.23	6.51	7.64	9.32	10.80	10.36	7.78	6.70	3.11	2.49	-------
1940---	2.00	2.02	4.78	5.90	8.52	10.50	12.08	10.90	7.58	7.73	3.85	3.30	79.16
1941---	1.58	2.07	-------	6.09	9.97	9.27	11.20	7.73	7.09	4.33	3.56	1.66	-------
1942---	3.08	3.34	4.22	4.28	7.38	10.32	12.52	10.94	8.17	5.65	3.65	2.66	76.21
1943---	-------	3.50	3.75	3.46	6.72	8.92	11.38	9.58	8.88	5.34	4.34	2.75	-------
1944---	2.07	1.09	4.04	4.00	7.11	7.54	10.32	10.90	8.49	5.67	2.57	2.98	66.78
1945---	2.03	2.11	4.40	5.57	6.68	8.27	11.25	7.26	6.81	5.56	3.33	2.10	65.37
Mean--	2.31	2.60	4.46	5.24	7.68	9.64	11.25	10.16	8.41	6.27	3.88	2.90	74.80

TABLE 213

EVAPORATION AT MORENA RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ------------------On Cottonwood Creek, a tributary of Tia Juana River. Lat. 32° 41′ N., Long. 116° 31′ W.
  Elevation -----------------3,045 feet.
Evaporation pan:
  Type ----------------------Floating pan.
  Description ---------------Square, 3 x 3 feet, depth 18 inches.
Authority for data-------------San Diego Water Department, Division of Water Development and Conservation.
Publication reference ---------None.
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935---	3.00	-------	-------	4.90	6.28	8.44	10.63	11.10	8.77	6.73	2.64	-------	-------
1936---	-------	-------	5.61	5.58	8.21	-------	-------	-------	8.39	8.62	-------	4.04	-------
1937---	-------	-------	-------	4.60	6.78	8.74	10.13	10.59	8.88	6.15	3.43	-------	-------
1938---	-------	-------	-------	-------	-------	8.22	-------	8.40	7.64	-------	-------	-------	-------
1939---	2.28	-------	4.22	-------	6.59	8.08	9.71	8.79	-------	5.32	2.06	1.14	-------
1940---	-------	-------	-------	-------	7.38	9.71	11.12	9.93	6.37	4.92	2.11	-------	-------
1941---	1.54	-------	-------	-------	8.87	8.08	10.41	6.63	-------	-------	-------	-------	-------
1942---	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
1943---	-------	-------	3.05	-------	-------	8.04	10.32	8.61	7.91	4.63	3.64	-------	-------
1944---	2.02	1.05	3.83	3.21	6.37	6.75	9.80	10.02	7.78	4.88	2.26	2.63	60.60
1945---	1.67	-------	4.44	4.74	5.89	7.43	10.06	6.87	6.41	5.12	3.33	2.10	-------
Mean--	2.10	1.05	4.23	4.61	7.05	8.16	10.27	8.99	7.77	5.80	2.78	2.48	65.29

TABLE 214

EVAPORATION AT MORRIS RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ____________________In San Gabriel Canyon on San Gabriel River about 4 miles above Azusa. Lat. 34° 11′ N., Long. 117° 53′ W.
Elevation ____________________(1) 950 feet from Oct. 1930 to Nov. 1933.
(2) 1,210 feet from Jan. 1934 to Dec. 1944.
Evaporation pan:
Type ____________________U. S. Weather Bureau pan.
Description ____________________Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data____________________Pasadena Water Department.
Publication reference ____________________None.
Meteorologic data ____________________Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
	Station located on valley floor												
1930	-------	-------	-------	-------	-------	-------	-------	-------	-------	6.04	5.18	3.16	-------
1931	2.87	2.88	6.40	6.19	6.98	7.79	10.37	9.13	7.60	5.41	3.61	1.75	70.98
1932	1.96	2.74	5.24	6.31	6.49	7.28	9.76	9.22	7.21	6.30	5.66	2.32	70.49
1933	2.54	3.80	5.60	5.36	7.36	10.00	11.60	10.69	7.99	7.22	7.02	-------	-------
Mean	2.46	3.14	5.75	5.95	6.94	8.36	10.58	9.68	7.60	6.24	5.37	2.41	74.48
	Station moved to new location on hill[1]												
1934	3.54	2.54	5.47	6.10	8.65	6.17	10.37	8.99	7.97	5.29	2.90	2.16	70.15
1935	2.06	3.12	-------	3.84	5.10	7.42	9.16	9.07	7.04	5.74	3.35	2.83	-------
1936	2.83	1.66	4.07	4.86	-------	8.36	9.12	8.86	7.20	4.97	4.40	2.15	-------
1937	.82	1.67	3.04	5.33	4.74	6.88	8.87	9.17	8.03	5.71	2.78	2.35	59.39
1938	2.35	1.82	2.90	4.45	5.72	6.35	8.46	8.33	7.34	4.38	3.94	2.40	58.44
1939	1.88	2.35	2.70	4.34	5.64	7.88	8.66	8.63	6.65	4.81	3.23	2.54	59.31
1940	1.49	2.03	3.74	3.62	6.54	6.97	9.80	8.63	6.92	5.82	3.36	2.27	61.19
1941	1.57	1.31	3.24	3.38	6.42	6.26	8.86	7.00	5.93	3.98	3.13	1.54	52.62
1942	1.88	2.34	4.14	3.37	6.46	6.72	9.62	8.15	6.40	4.39	2.99	2.21	58.67
1943	2.42	2.40	2.38	4.05	6.76	7.06	8.87	8.59	7.64	4.97	3.61	1.64	60.29
1944	1.79	1.60	3.91	4.37	5.50	5.27	7.68	8.76	6.34	4.36	2.09	2.10	53.77
Mean	2.06	2.08	3.56	4.34	6.15	6.85	9.04	8.56	7.04	4.95	3.25	2.20	60.08

[1] The original station, formerly called Pine Canyon Station, 1930 to 1933, was located on Dixie Flat in San Gabriel Canyon, now submerged by Morris Reservoir, at elevation 950 feet and about 1,400 feet upstream from Morris Dam. In January, 1934, it was moved to the top of a ridge between Water Canyon and Morris Reservoir at elevation 1,210 feet and about 2,800 feet north of Morris Dam. The original exposure was in the canyon bottom on nearly level ground before water was stored in the reservoir. The permanent exposure is on the eastern slope of the mountain at heights varying from 35 to 210 feet above the reservoir surface depending on the changing water levels.

TABLE 215

EVAPORATION AT MORRIS RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ——— In San Gabriel Canyon on San Gabriel River about 4 miles above Azusa. Lat. 34° 11′ N., Long. 117° 53′ W.
Elevation ——— (1) 950 feet from Oct. 1930 to Nov. 1933.
(2) 1,210 feet from Jan. 1934 to Dec. 1944.
Evaporation pan:
Type ——— Ground pan.
Description ——— Diameter 6 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data ——— Pasadena Water Department.
Publication reference ——— None.
Meteorologic data ——— Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
	Station located on valley floor												
1930	-------	-------	-------	-------	-------	-------	-------	-------	-------	5.14	4.15	2.76	-------
1931	2.21	2.39	4.97	4.49	5.46	6.26	8.80	7.68	6.30	4.33	2.77	1.34	57.00
1932	1.54	1.78	3.89	5.03	5.26	6.20	7.64	7.46	5.44	5.02	4.28	1.90	55.44
1933	1.92	3.07	4.21	3.77	5.62	7.36	8.53	8.11	6.17	5.69	4.90	-------	-------
Mean	1.89	2.41	4.36	4.43	5.45	6.61	8.32	7.75	5.97	5.04	4.02	2.00	58.25
	Station moved to new location on hill[1]												
1934	2.80	2.17	4.45	5.33	7.32	5.72	8.72	8.08	7.04	4.52	2.76	1.96	60.87
1935	1.62	2.60	2.59	3.46	4.50	6.58	8.12	7.94	6.34	5.23	3.05	2.52	54.55
1936	2.50	1.44	3.40	3.97	6.68	7.43	8.21	8.14	7.04	4.82	4.27	2.06	59.96
1937	1.00	1.56	2.71	4.75	4.72	6.11	8.30	7.94	7.10	5.20	2.88	2.39	54.66
1938	2.14	1.48	2.65	3.97	5.03	6.01	7.68	7.61	6.84	4.49	3.92	2.12	53.94
1939	1.75	2.20	2.46	4.10	5.26	7.32	8.16	8.06	6.22	4.66	3.32	2.58	56.09
1940	1.36	1.80	3.26	3.70	6.04	6.58	8.99	7.97	6.58	5.47	3.32	2.09	57.16
1941	1.42	1.26	2.69	2.90	5.51	5.71	7.80	6.37	5.66	3.91	2.89	1.44	47.56
1942	1.67	2.06	3.58	3.10	5.90	6.35	8.72	7.69	6.07	4.27	2.78	2.04	54.23
1943	2.11	1.91	2.04	3.46	6.20	6.34	8.00	7.88	6.83	4.79	3.40	1.54	54.50
1944	1.56	1.42	3.28	3.73	5.10	4.98	7.32	7.96	5.86	4.18	2.03	1.93	49.35
Mean	1.81	1.81	3.01	3.86	5.66	6.28	8.18	7.78	6.51	4.68	3.15	2.06	54.79

[1] The original station, formerly called Pine Canyon Station, 1930 to 1933, was located on Dixie Flat in San Gabriel Canyon, now submerged in Morris Reservoir, at elevation 950 feet and about 1,400 feet upstream from Morris Dam. In January, 1934, it was moved to the top of a ridge between Water Canyon and Morris Reservoir at elevation 1,210 feet and about 2,800 feet north of Morris Dam. The original exposure was in the canyon bottom on nearly level ground before water was stored in the reservoir. The permanent exposure is on the eastern slope of the mountain at heights varying from 35 to 210 feet above the reservoir surface depending on the changing water levels.

TABLE 216

TEMPERATURES AT EVAPORATION STATION, MORRIS RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
	Station located on valley floor												
1930	-------	-------	-------	-------	-------	-------	-------	-------	-------	63	59	49	-------
1931	52	54	59	62	65	68	77	75	68	64	53	48	62
1932	46	51	57	59	61	66	69	70	67	62	62	48	60
1933	47	49	55	56	58	65	71	70	62	66	60	54	59
Mean	48	51	57	59	61	66	72	72	66	64	58	50	60
	Station moved to new location on hill												
1934	51	53	62	62	66	63	73	71	70	63	55	52	62
1935	49	53	49	56	58	65	71	74	69	61	53	51	59
1936	51	50	55	58	63	68	75	74	70	64	60	51	62
1937	40	49	54	58	63	66	72	73	72	66	57	54	60
1938	52	50	52	56	61	63	70	73	73	62	55	54	60
1939	49	46	52	60	61	67	71	73	74	65	60	56	61
1940	52	52	-------	60	64	65	72	72	68	-------	-------	-------	-------
Mean	49	50	54	58	62	65	72	73	71	64	57	53	61

TABLE 217

WIND MOVEMENT AT EVAPORATION STATION, MORRIS RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
	Station located on valley floor												
1930	-------	-------	-------	-------	-------	-------	-------	-------	-------	1,944	2,232	2,245	-------
1931	2,129	1,737	2,176	1,824	1,796	1,735	2,009	1,833	1,759	1,670	1,604	1,637	21,909
1932	1,734	1,683	1,873	1,764	1,707	1,713	2,173	2,197	1,939	2,047	1,907	1,749	22,486
1933	1,944	2,253	2,330	2,183	2,732	3,275	3,626	3,283	2,937	2,707	2,352	-------	-------
Mean	1,936	1,891	2,126	1,924	2,078	2,241	2,603	2,638	2,212	2,092	2,024	1,877	25,642
	Station moved to new location on hill[1]												
1934	1,626	1,206	1,722	1,621	1,671	1,452	1,728	1,529	1,372	1,348	1,064	1,150	17,489
1935	1,157	1,020	1,130	1,182	1,115	1,275	1,320	1,272	1,194	1,386	1,063	1,068	14,182
1936	1,005	942	1,262	1,234	1,498	1,470	1,487	1,471	1,437	-------	1,073	-------	-------
1937	1,078	1,001	1,376	1,121	1,189	1,225	1,451	1,356	1,338	1,287	1,130	976	26,912
1938	823	936	1,204	1,011	1,132	1,163	3,161	1,227	1,138	1,006	1,096	870	14,827
1939	887	1,120	944	1,186	1,192	1,480	1,684	1,694	1,224	1,090	1,017	1,086	14,604
1940	858	890	-------	-------	1,106	1,323	1,445	1,501	1,248	-------	-------	-------	-------
Mean	1,062	1,016	1,273	1,256	1,272	1,341	1,754	1,436	1,279	1,235	1,074	1,030	15,028

[1] Anemometer cups were set a few inches higher than the top of the Weather Bureau pan. The station was on top of a sharp ridge that deflected wind upward so that much of it passed over too high to be recorded at ground level, accounting for much of the difference in total wind before and after the station was moved.

TABLE 218

EVAPORATION AT MURRAY (LA MESA) RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ------------------Five miles east of San Diego. Lat. 32° 47′ N., Long. 117° 02′ W.
  Elevation ------------------480 feet.
Evaporation pan:
  Type ----------------------Floating pan.
  Description ----------------Square, 3 x 3 feet, depth 18 inches, painted black.
Authority for data-------------Volcan Land and Water Company.
Publication reference ----------Trans. Am. Soc. C. E. Vol. 80 (33), W. S. P. 446 (12) and unpublished report by George Cromwell, Engr., San Diego County Water Company (11).
Meteorologic data ------------Temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1913---	1.59	4.23	4.51	6.19	7.54	6.98	9.64	8.45	8.21	6.46	3.42	2.70	69.92
1914---	2.37	2.94	6.15	6.16	5.48	7.76	9.03	8.26	6.54	4.47	4.34	2.57	66.07
1915---	1.73	2.40	4.99	5.15	6.45	8.01	9.34	7.89	6.02	5.10	4.11	1.44	62.63
1916---	1.85	2.75	3.98	5.77	8.33	7.65	9.90	7.87	5.81	4.89	5.54	3.09	67.43
1917---	2.72	2.88	4.17	3.55	4.05	6.96	7.60	8.08	7.38	5.12	4.10	3.48	60.09
1918---	-------	-------	-------	4.02	6.27	6.63	8.20	8.22	6.55	4.75	3.07	1.71	-------
1919---	2.00	2.95	4.05	3.99	5.48	7.12	8.29	7.64	6.26	4.64	-------	-------	-------
1920---	2.43	2.93	4.28	3.79	4.71	6.64	7.12	6.56	5.32	4.48	2.21	1.62	52.09
1921---	2.40	2.98	2.31	-------	-------	-------	-------	7.39	7.95	4.66	3.29	2.63	-------
1922---	2.45	2.34	-------	-------	6.71	6.72	7.93	7.06	6.74	4.79	2.50	3.29	-------
1923---	4.30	3.64	-------	-------	7.02	6.41	-------	-------	-------	-------	-------	-------	-------
Mean--	2.38	3.00	4.31	4.83	6.20	7.09	8.56	7.74	6.68	4.94	3.62	2.61	61.96

TABLE 219

EVAPORATION AT MURRAY (LA MESA) RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ------------------Five miles east of San Diego. Lat. 32° 47′ N., Long. 117° 02′ W.
  Elevation ------------------480 feet.
Evaporation pan:
  Type ----------------------Floating pan.
  Description ----------------Square, 3 x 3 feet, depth 18 inches, painted black.
Authority for data-------------La Mesa, Lemon Grove and Spring Valley Irrigation District.
Publication reference ----------None.
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1941---	-------	-------	-------	-------	-------	6.45	6.56	6.51	6.42	3.60	-------	-------	-------
1942---	2.11	1.99	2.34	2.81	5.88	6.20	7.85	7.04	5.64	3.97	2.49	2.86	51.18
1943---	-------	-------	2.18	4.12	6.07	6.28	7.49	7.00	5.66	4.23	3.85	-------	-------
1944---	1.55	.94	3.23	5.22	5.04	5.64	7.16	6.84	4.80	4.03	-------	2.43	-------
1945---	1.84	-------	-------	4.05	6.03	5.42	7.30	6.82	6.24	4.52	2.40	-------	-------
Mean--	1.83	1.46	2.58	4.05	5.76	6.00	7.27	6.84	5.75	4.07	2.91	2.64	51.56

TABLE 220

EVAPORATION AT MURRAY (LA MESA) RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Year	Mean temperature in ° F. (11)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1913	54	54	58	64	67	66	72	77	75	70	64	57	65
1914	58	60	65	66	65	70	73	74	73	72	69	56	67
1915	57	58	64	64	66	72	75	78	73	71	65	60	67
1916	54	62	65	66	66	69	73	75	72	65	62	56	65
1917	54	59	60	57	-------	64	71	73	73	68	61	59	-------
1918	54	56	-------	-------	63	73	74	75	75	71	56	54	-------
1919	54	53	54	60	62	71	-------	-------	-------	62	62	58	-------
1920	56	58	59	61	64	69	75	75	70	64	60	54	64
1921	54	58	61	61	62	69	74	74	71	66	62	59	64
1922	51	48	48	52	60	67	68	74	75	66	56	-------	-------
1923	60	58	64	64	71	68	74	-------	-------	-------	-------	-------	-------
Mean	55	57	60	62	65	69	73	75	73	68	62	57	65

TABLE 221

EVAPORATION AT NEWARK, ALAMEDA COUNTY, CALIFORNIA

Station:

Location	One and one-half miles south of Newark at the Leslie Salt Works. Lat. 37° 31′ N., Long. 120° 02′ W. This station is so close to the former Alvarado station that the records of the two stations may be combined.
Elevation	14 feet.

Evaporation pan:

Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	Leslie Salt Works.
Publication reference	U. S. Weather Bureau Climatological Data (41).
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1942	[1]1.27	[1]2.28	[1]3.91	4.10	6.82	9.00	9.33	7.78	5.88	4.22	2.07	1.09	57.75
1943	1.44	1.88	2.62	4.44	8.35	8.22	8.77	8.05	6.76	4.42	2.16	1.85	58.96
1944	1.29	2.24	4.35	4.75	7.65	7.08	8.38	7.85	6.24	3.81	2.23	.80	56.67
1945	.88	2.06	2.94	6.06	6.50	8.69	11.33	7.44	6.93	3.66	1.65	1.24	59.38
Mean	1.22	2.12	3.46	4.84	7.33	8.25	9.45	7.78	6.45	4.03	2.03	1.24	58.20

[1] Records from Alvarado station.

TABLE 222

TEMPERATURE AT NEWARK, ALAMEDA COUNTY, CALIFORNIA[1]

Year	Mean temperature in ° F. (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1942	50	51	53	54	57	61	65	64	62	60	52	48	56
1943	48	52	54	56	61	62	65	65	66	60	55	50	58
1944	48	48	52	53	60	62	64	63	65	60	52	49	56
1945	45	50	49	54	57	64	65	63	65	61	53	49	56
Mean	48	50	52	54	59	62	65	64	64	60	53	49	56

[1] This station is so close to the former Alvarado station that the records of the two may be combined.

TABLE 223

WIND MOVEMENT AT NEWARK, ALAMEDA COUNTY, CALIFORNIA[1]

Year	Total wind in miles (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1942	1,506	2,115	2,161	2,523	2,063	3,002	2,858	2,572	2,100	1,828	1,662	1,625	26,015
1943	2,033	1,310	1,408	1,524	2,536	3,199	2,685	2,698	2,122	2,041	1,218	1,680	24,454
1944	1,866	2,124	2,050	2,712	2,994	3,157	2,937	2,770	2,270	1,942	1,822	1,398	28,042
1945	1,433	2,039	2,526	2,644	2,995	2,320	2,622	2,692	2,389	1,995	1,642	2,299	27,596
Mean	1,710	1,897	2,036	2,351	2,647	2,920	2,776	2,683	2,220	1,951	1,586	1,750	26,527

[1] Anemometer cups set 6½ inches above top of evaporation pan.

TABLE 224

EVAPORATION AT NEWHALL, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ____________________On highway ¼ mile north of Newhall. Lat. 34° 23′ N., Long. 118° 32′ W.*
Elevation ____________________1,243 feet.
Evaporation pan:
Type ____________________Ground pan.
Description ____________________Diameter 2 feet, depth 3 feet, set 2.75 feet in ground.
Authority for data____________________Los Angeles County Flood Control District.
Publication reference ____________________Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ____________________None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	3.52	2.49	5.29	7.11	6.30	9.01	11.42	10.30	8.28	7.16	6.32	3.84	81.04
1933	[1]1.97	3.48	4.12	5.40	7.46	8.14	10.38	10.32	7.27	6.36	5.74	2.30	72.94
1934	3.60	2.44	5.34	6.63	8.36	5.90	9.84	9.60	8.38	6.24	3.93	3.16	73.42
1935	2.58	3.98	3.75	4.70	6.83	8.90	[2]9.70	[2]9.48	8.08	7.00	4.03	3.76	72.79
1936	3.70	2.63	4.90	4.95	8.56	9.37	10.14	10.26	8.46	6.10	5.71	3.23	78.01
1937	2.00	2.14	3.36	6.32	5.84	7.52	8.54	9.60	8.38	6.80	3.88	3.52	67.90
1938	3.54	1.75	3.58	5.16	6.99	6.56	9.32	9.18	8.18	6.54	6.30	4.18	71.28
1939	3.27	3.62	4.28	6.27	7.48	[2]7.96	[2]9.32	9.57	8.40	6.50	4.67	3.58	74.92
1940	2.58	2.45	4.10	4.48	6.74	8.22	9.80	8.68	8.35	6.90	5.24	2.62	70.16
1941	1.28	1.20	2.65	3.62	6.72	6.79	8.30	7.22	6.52	4.84	4.05	3.08	56.27
1942	3.72	3.55	5.20	5.01	6.32	5.85	8.30	7.92	7.14	4.72	4.78	3.45	65.96
1943	2.79	2.86	2.86	3.56	5.84	6.36	7.06	7.97	7.74	6.12	5.44	2.59	61.19
1944	3.40	2.02	5.03	5.21	5.70	6.34	8.47	9.71	7.09	5.44	3.40	3.57	65.38
1945	2.82	2.68	2.36	5.32	7.02	6.87	9.88	9.40	7.92	5.81	4.54	2.82	67.44
Mean	2.91	2.66	4.06	5.26	6.86	7.41	9.32	9.22	7.87	6.18	4.86	3.26	69.90

* Pan located on level ground 36 feet from nearest house and near scattered trees.

[1] Incomplete.

[2] Partly estimated.

TABLE 225

EVAPORATION AT NEWPORT BAY, ORANGE COUNTY, CALIFORNIA

Station:
  Location ---------- At Irvine Salt Works, upper end of Newport Bay, about 5 miles northeast of Costa Mesa. Lat. 33° 39′ N., Long. 117° 52′ W.
  Elevation ---------- Approx. 50 feet.
Evaporation pan:
  Type ---------- Surface pan.
  Description ---------- Diameter 4 feet, depth 16 inches, set on platform 12 inches above ground, painted black inside and outside. Depth of water 12 inches.
Authority for data ---------- The Irvine Salt Works.
Publication reference ---------- None.
Meteorologic data ---------- None.

Year	Evaporation in inches[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1937	-------	-------	-------	2.25	6.75	6.50	6.25	7.50	5.00	3.50	2.25	1.75	-------
1938	1.75	-------	-------	3.50	5.50	6.50	6.75	6.50	4.50	2.50	4.50	-------	-------
1939	2.23	3.08	2.66	4.26	6.00	6.50	7.75	6.75	7.40	4.30	2.57	2.43	55.93
1940	2.00	3.36	4.06	5.60	6.50	6.10	7.25	6.20	4.75	5.51	5.60	2.30	59.23
Mean	2.99	3.22	3.36	3.90	6.19	6.40	7.00	6.74	5.41	3.95	3.73	2.16	55.05

[1] The above record was obtained from fresh water.

Year	Evaporation in inches[2]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1941	-------	-------	3.38	4.51	6.88	5.50	6.50	5.25	4.50	3.27	2.62	2.00	-------
1942	1.82	2.81	4.18	3.97	6.25	5.04	6.25	5.37	4.50	4.03	2.26	1.97	48.45
1943	1.45	-------	2.48	3.37	5.28	6.25	6.50	5.50	4.50	3.36	2.62	-------	-------
1944	1.45	-------	4.71	4.72	5.00	5.50	6.50	6.25	4.50	3.00	4.44	1.52	-------
1945	1.25	1.72	2.63	3.75	4.50	4.50	5.50	6.03	5.00	3.22	2.49	1.43	42.02
1946	2.65	2.93	4.56	4.87	5.50	5.50	-------	-------	-------	-------	-------	-------	-------
Mean	1.72	2.49	3.66	4.20	5.57	5.38	6.25	5.68	4.60	3.38	2.89	1.73	47.55

[2] This record was obtained from the same pan containing a rather dense salt solution.

TABLE 226

EVAPORATION AT NORTH FORK, MADERA COUNTY, CALIFORNIA

Station:
  Location ____________________At North Fork, Headquarters of Sierra National Forest. Lat. 37° 15′ N., Long. 119° 27 W.[1]
  Elevation __________________2,725 feet.
Evaporation pan:
  Type _______________________U. S. Weather Bureau pan.
  Description ________________Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data_____________California Forest and Range Experimental Station, North Fork Station.
Publication reference _________None.
Meteorologic data ____________Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	------	------	2.95	5.31	6.23	6.95	10.36	9.91	7.68	3.92	------	------	------
1935	------	------	------	------	5.14	8.08	9.25	9.20	7.10	3.56	------	------	------
1936	------	------	2.46	3.25	5.84	6.57	9.22	9.38	6.38	3.83	1.54	------	------
1937	------	------	------	3.52	6.51	7.93	9.84	8.54	6.17	3.31	1.00	------	------
1938	0.56	0.84	1.81	2.59	4.33	6.17	8.18	7.88	5.76	2.24	.74	0.42	41.52
1939	.37	1.05	1.79	3.80	4.97	7.06	8.26	8.51	5.24	2.20	1.17	.49	44.91
1940	.48	.63	2.14	2.68	5.37	7.79	9.35	8.29	5.14	2.79	.76	.65	46.07
1941	.47	.46	1.82	2.58	4.73	5.86	8.55	6.68	5.43	2.50	.87	------	------
1942	.35	.78	2.08	1.71	3.94	7.16	8.65	7.72	5.00	------	------	------	------
Mean	.45	.75	2.15	3.18	5.23	7.06	9.07	8.46	5.99	3.04	1.01	.52	46.91

[1] Pan was protected from wind by mixed timber with brush 10 to 12 feet high and scattering pine up to 110 feet high. Pan was in shade in early morning and late afternoon, on a 30 percent slope open to the southwest.

TABLE 227

TEMPERATURE AT NORTH FORK, MADERA COUNTY, CALIFORNIA

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	44	47	56	60	64	67	79	79	72	61	49	42	60
1935	40	44	41	51	57	72	75	79	74	56	45	43	56
1936	43	40	49	55	62	70	80	79	72	60	53	43	59
1937	31	43	48	52	63	69	78	77	71	62	51	46	58
1938	44	43	43	52	60	70	77	76	71	57	47	46	57
1939	42	39	48	57	60	69	78	78	70	58	53	48	58
1940	46	45	52	54	64	74	75	77	66	60	48	47	59
1941	44	47	49	50	60	65	77	72	65	55	51	41	56
1942	44	41	47	50	56	67	78	76	------	------	------	------	------
Mean	42	43	48	53	61	69	77	77	70	59	50	44	58

TABLE 228

WIND MOVEMENT AT NORTH FORK, MADERA COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	-------	-------	900	881	706	824	1,038	1,047	914	766	528	672	-------
1935	520	558	649	780	733	784	922	881	808	729	622	582	8,568
1936	592	586	791	643	674	629	742	895	855	815	714	449	8,385
1937	533	700	856	965	881	909	884	958	857	820	639	736	9,738
1938	713	752	942	671	567	550	659	731	666	614	545	530	7,940
1939	606	875	766	553	502	558	652	651	544	450	439	346	6,942
1940	275	301	530	414	356	327	395	526	495	439	368	352	4,778
1941	364	281	465	395	358	352	416	470	454	602	448	290	4,895
1942	332	563	755	488	545	480	434	369	409	-------	-------	-------	-------
Mean	492	577	739	643	591	601	682	725	667	654	538	495	7,404

[1] Anemometer was set at brush top level, about 10 or 12 feet above ground.

TABLE 229

EVAPORATION NEAR O'NEAL'S, SAN JOAQUIN EXPERIMENTAL RANGE, MADERA COUNTY, CALIFORNIA

Station:
  Location ------------------At San Joaquin Experimental Range Station about 15 miles northeast of Madera. Lat. 37° 06′ N., Long. 119° 43′ W.[1]
  Elevation ------------------1,050 feet.
Evaporation pan:
  Type ----------------------U. S. Weather Bureau pan.
  Description ----------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data------------California Forest and Range Experiment Station, San Joaquin Branch.
Publication reference ---------None.
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1942	-------	-------	-------	-------	-------	-------	-------	-------	7.69	6.18	2.14	1.24	-------
1943	1.28	1.93	2.89	4.90	8.42	11.89	14.21	13.35	10.17	5.97	3.50	2.04	80.55
1944	1.52	2.21	3.83	4.40	9.33	11.67	13.46	13.38	10.81	6.82	1.58	1.20	80.21
Mean	1.40	2.07	3.36	4.65	8.88	11.78	13.84	13.36	9.56	6.32	2.41	1.49	79.12

[1] Location in open rolling woodland. Buildings, brush and trees within 200 feet of evaporation pan.

TABLE 230

EVAPORATION AT OAKDALE (NEAR), STANISLAUS COUNTY, CALIFORNIA

Station:
  Location ------------------About 8 miles north of Oakdale at Woodward Reservoir. Lat. 37° 52′ N., Long. 120° 49′ W.*
  Elevation ------------------215 feet.
Evaporation pan:
  Type ----------------------U. S. Weather Bureau pan.
  Description ----------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data--------------U. S. Weather Bureau.
Publication reference ----------U. S. Weather Bureau Climatological Data (41).
Meteorologic data -------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1918---	-------	-------	-------	-------	-------	-------	-------	-------	[1]5.65	4.96	2.29	-------	-------
1919---	1.62	1.68	3.36	4.90	9.15	13.80	15.50	14.39	9.96	6.88	4.44	[2]1.32	87.00
1920---	[3]1.47	2.30	3.25	5.93	10.95	12.38	14.21	13.99	9.75	4.56	2.23	1.13	82.15
1921---	1.26	1.69	2.69	6.90	8.58	13.37	17.03	14.65	10.35	-------	-------	-------	-------
1922---	1.09	1.88	3.14	5.72	9.89	12.22	15.33	13.25	11.79	6.04	1.74	1.06	83.15
1923---	.83	1.51	4.65	4.48	9.36	10.57	15.23	13.13	10.20	5.78	3.41	1.68	80.83
1924---	1.48	2.16	4.19	7.51	12.83	15.22	17.06	14.94	11.41	5.03	2.15	-------	-------
1925---	.83	1.76	2.82	4.31	-------	-------	-------	12.62	8.07	4.78	2.11	.74	-------
1926---	-------	1.89	3.89	5.53	10.14	14.19	15.05	13.71	9.72	6.14	3.14	1.57	-------
1927---	1.14	2.43	3.18	4.66	9.65	12.37	14.82	12.34	9.18	6.06	1.64	1.59	79.06
1928---	.95	1.70	3.06	4.66	10.52	14.28	14.34	13.25	9.62	5.17	2.15	1.78	81.48
1929---	1.00	2.67	3.62	4.63	10.10	11.28	14.60	13.67	9.02	6.15	3.26	1.38	81.38
1930---	1.14	1.86	3.71	4.98	7.75	14.53	15.19	13.48	8.05	5.06	3.94	-------	-------
1931---	1.69	1.54	3.06	6.47	11.36	11.36	16.75	12.97	8.76	5.17	2.60	.94	82.67
1932---	.98	1.60	3.24	5.21	8.92	12.51	14.42	12.09	8.91	6.50	3.71	1.07	79.16
1933---	1.30	2.01	3.06	5.40	7.42	11.47	14.87	12.20	8.16	6.72	2.50	.86	75.97
1934---	.75	1.60	2.90	6.90	10.46	11.29	15.16	12.41	9.31	5.28	1.90	1.09	79.05
1935---	2.16	1.32	3.07	4.19	8.39	13.08	13.72	12.31	8.40	4.00	1.70	1.09	73.43
1936---	.89	1.48	2.84	4.38	9.71	11.46	14.33	12.97	9.32	4.82	1.97	1.30	75.47
1937---	1.04	1.93	2.62	4.85	8.79	10.96	13.96	11.87	8.54	4.31	2.44	.94	72.25
1938---	.87	1.45	2.99	4.06	8.99	13.09	14.06	11.68	7.88	3.87	2.44	.62	72.00
1939---	.68	2.40	2.72	5.53	9.09	12.36	13.87	12.75	8.81	4.16	2.72	1.11	76.20
1940---	-------	1.35	3.04	4.54	-------	13.89	13.41	12.13	6.92	4.72	2.29	1.35	-------
1941---	1.02	-------	-------	4.29	8.39	10.89	13.82	10.58	7.78	4.86	1.79	1.54	-------
1942---	.88	1.74	3.49	4.55	7.08	12.43	14.85	11.95	8.37	5.24	2.02	.78	73.38
1943---	1.03	1.06	-------	4.46	10.78	10.50	-------	-------	8.23	4.62	-------	-------	-------
Mean--	1.13	1.79	3.24	5.16	9.49	12.48	14.85	12.89	8.93	5.24	2.52	1.19	78.91

* Station located on knoll about 300 feet southwest of Woodward Reservoir. Lower foothills of Sierra Nevada mountains extend to the south, east and north, level San Joaquin Valley extends to the west.

[1] Two days missing.

[2] Three days missing.

[3] Five days missing.

TABLE 231

TEMPERATURE AT OAKDALE (NEAR), STANISLAUS COUNTY, CALIFORNIA[1]

Year	Mean temperature in ° F. (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1920	47	52	54	56	64	71	74	77	69	58	51	44	60
1921	43	48	53	56	63	71	78	74	69	63	55	47	60
1922	39	45	48	53	65	73	78	74	76	63	50	46	59
1923	43	47	53	55	62	66	75	76	74	63	56	44	60
1924	42	54	57	59	68	70	75	75	71	60	50	41	60
1925	44	49	51	54	62	71	78	74	64	62	52	45	59
1926	40	51	57	61	66	78	79	75	68	63	58	44	62
1927	46	50	51	55	63	71	77	73	67	63	52	44	59
1928	43	47	53	53	65	71	75	74	71	61	52	41	59
1929	40	46	51	52	64	70	75	78	71	65	53	47	59
1930	43	52	54	57	59	71	76	74	67	61	54	42	59
1931	45	51	52	61	69	70	82	77	68	61	50	43	61
1932	42	47	52	56	65	70	78	77	76	64	57	44	61
1933	44	47	54	57	60	70	82	78	69	69	56	45	61
1934	46	51	58	63	68	71	78	79	73	64	56	48	63
1935	46	48	50	57	63	75	76	78	72	61	51	47	60
1936	49	50	54	59	67	72	78	80	75	66	55	44	62
1937	38	48	54	55	66	72	80	78	72	65	56	49	61
1938	44	50	50	54	64	75	78	76	74	63	51	47	60
1939	44	46	52	61	65	74	77	77	75	64	56	49	62
1940	49	52	55	58	67	76	77	76	70	65	53	50	62
1941	49	-------	-------	56	66	71	80	73	70	62	55	48	-------
1942	47	50	52	58	61	71	79	75	70	64	53	47	61
1943	48	53	55	60	67	70	76	73	73	63	54	47	62
Mean	44	49	53	57	64	72	78	76	71	63	54	46	60

[1] Temperatures were recorded at the Oakdale (Near) evaporation station at Woodward Reservoir.

TABLE 232

WIND MOVEMENT AT OAKDALE (NEAR), STANISLAUS COUNTY, CALIFORNIA[1]

Year	Total wind in miles (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1918	-------	-------	-------	-------	-------	-------	-------	-------	-------	2,659	2,727	2,911	-------
1919	2,639	3,708	3,528	2,466	3,353	3,579	4,651	4,403	3,533	2,941	3,300	4,022	42,123
1920	2,534	2,400	3,030	3,200	3,170	3,370	3,910	3,635	3,245	3,040	3,065	3,705	38,304
1921	4,460	2,540	2,450	3,100	2,410	4,230	4,320	4,100	3,280	-------	-------	-------	-------
1922	3,120	3,660	3,150	3,125	2,650	3,005	3,505	3,100	2,465	2,840	2,540	3,485	36,645
1923	2,895	2,240	2,615	2,670	2,505	2,795	3,680	3,525	2,795	2,535	2,420	4,450	35,125
1924	3,640	3,730	4,990	5,030	6,850	6,620	8,130	6,840	6,280	4,230	3,550	4,300	64,190
1925	3,510	4,120	2,760	2,920	4,200	4,580	6,215	6,100	5,105	3,350	2,710	2,950	48,520
1926	3,660	4,895	3,365	4,270	4,480	4,845	5,730	6,175	5,505	4,250	4,030	3,655	54,860
1927	3,225	4,775	3,850	3,200	4,365	5,330	5,465	5,620	5,065	3,530	3,180	3,550	51,155
1928	2,660	3,040	3,670	3,255	5,005	5,575	2,690	5,225	4,300	4,445	3,375	3,280	46,520
1929	3,030	3,740	3,850	3,425	5,120	4,750	6,200	4,540	3,660	3,370	1,325	2,890	45,900
1930	3,300	3,080	3,525	3,239	4,080	4,840	5,475	5,475	4,840	3,540	3,120	-------	-------
1931	3,345	2,295	2,870	3,060	4,810	4,825	4,375	4,170	3,920	3,175	3,095	4,615	44,555
1932	3,140	-------	3,310	3,820	4,105	4,575	4,453	3,747	2,790	3,275	2,235	2,985	-------
1933	3,970	2,635	3,260	3,250	3,160	4,340	3,955	4,065	3,900	2,775	2,905	3,010	41,225
1934	2,705	2,513	1,560	3,315	4,025	4,130	3,880	3,990	2,790	2,475	2,645	2,945	36,975
1935	3,505	2,315	3,540	2,865	4,100	3,860	4,145	3,775	3,635	2,675	2,160	2,295	38,870
1936	3,695	4,185	2,260	2,450	3,105	3,250	3,005	3,400	2,385	2,035	1,095	2,605	33,470
1937	3,640	3,140	2,890	4,130	3,805	3,940	3,940	3,060	2,975	2,115	2,140	2,600	38,375
1938	2,955	4,760	4,120	2,120	3,600	4,250	3,910	3,320	1,740	-------	2,220	2,400	-------
1939	3,110	3,870	2,900	2,815	3,320	3,815	4,110	4,611	2,566	1,976	1,582	2,585	37,260
1940	3,795	4,229	2,641	3,052	4,073	4,832	3,910	3,490	2,885	2,025	1,710	3,850	40,492
1941	3,890	-------	-------	-------	3,540	3,370	3,505	3,880	2,955	2,300	1,745	5,290	-------
1942	2,920	2,590	3,625	3,215	3,295	4,025	4,140	3,660	3,330	2,720	2,870	2,340	38,730
1943	3,965	2,730	3,455	2,800	4,095	4,010	5,010	4,310	3,685	3,115	2,160	-------	-------
Mean	3,332	3,356	3,217	3,200	3,889	4,270	4,492	4,329	3,585	2,975	2,556	3,336	42,537

[1] Wind was recorded at Woodward Reservoir. Anemometer cups set 6 inches above evaporation pan.

TABLE 233

EVAPORATION AT ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA

Station:	
Location	Within city limits of Ontario. Lat. 34° 04′ N., Long. 117° 39′ W.[1]
Elevation	Approx. 1,000 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	Div. of Irrig., SCS, U. S. Dept. of Agric.
Publication reference	Calif. Dept. of Pub. Wks., Bull. No. 44 (6).
Meteorologic data	Temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1928	------	------	3.39	6.28	6.04	7.37	9.74	9.28	8.25	4.44	3.46	1.96	------
1929	1.87	1.85	3.53	3.83	7.31	8.59	10.17	10.55	6.39	6.21	4.96	3.32	68.58
1930	1.51	2.57	3.54	5.19	5.25	6.76	8.43	7.65	4.98	3.48	2.95	1.74	54.05
1931	2.17	2.19	5.02	5.23	6.11	6.70	------	------	------	------	------	------	------
Mean	1.85	2.20	3.87	5.13	6.18	7.36	9.45	9.16	6.54	4.71	3.79	2.34	62.58

[1] Pan located on level ground in populated area.

TABLE 234

TEMPERATURE AT ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA[1]

Year	Temperature in ° F. (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1928	52	52	56	59	65	66	72	73	70	60	55	49	61
1929	48	48	52	55	64	68	74	77	70	66	56	54	61
1930	48	54	55	60	59	67	73	73	66	62	57	48	60
1931	51	54	58	63	67	69	79	77	69	63	52	46	62
Mean	50	52	55	59	64	68	74	75	69	63	55	49	61

[1] Pomona records, 6 miles west of Ontario.

TABLE 235

EVAPORATION AT PACOIMA DAM, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ------------------On Pacoima Creek. Lat. 34° 20′ N., Long. 118° 24′ W.*
  Elevation ------------------1,500 feet.
Evaporation pan:
  Type ----------------------Ground pan.
  Description ----------------Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data------------Los Angeles County Flood Control District.
Publication reference ---------Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	------	------	------	------	------	------	------	------	------	6.07	7.10	4.46	------
1931	2.72	2.98	7.61	6.50	5.18	6.85	9.54	8.58	8.64	7.28	5.93	2.51	74.32
1932	2.33	1.92	5.44	6.56	5.28	7.82	9.28	9.04	7.83	7.29	7.81	3.36	73.96
1933	3.42	4.32	5.64	4.94	5.72	6.21	9.12	8.10	6.74	6.90	7.28	3.46	71.85
1934	4.62	2.79	4.99	6.02	6.27	3.68	7.70	7.26	7.69	6.20	3.74	3.33	64.29
1935	2.28	3.12	2.78	3.16	3.80	4.72	6.78	7.42	6.66	5.81	4.29	3.61	54.43
1936	3.34	1.93	4.22	4.53	5.51	5.52	6.70	7.11	7.98	5.56	5.65	3.08	61.13
1937	[1] .74	1.94	3.82	5.40	3.92	4.85	7.17	6.58	6.99	6.59	3.26	3.04	53.30
1938	3.18	1.84	3.22	4.22	3.96	3.92	6.09	6.70	7.48	6.75	------	5.74	------
1939	4.67	4.23	4.27	6.22	[2]6.33	8.12	8.88	8.06	7.76	8.75	6.84	6.18	80.31
1940	2.96	3.41	4.87	4.68	6.38	6.69	10.16	7.40	6.93	7.12	7.00	4.58	72.18
1941	2.80	2.36	3.93	3.79	[2]7.15	5.65	8.64	6.64	6.08	5.74	6.41	3.39	62.58
1942	4.74	4.16	5.86	2.96	5.96	[2]6.72	[2]8.19	6.82	6.40	5.49	5.78	4.51	67.59
1943	4.73	4.02	2.80	3.66	6.38	6.80	7.26	6.91	7.27	5.30	5.92	3.42	64.47
1944	3.96	2.36	5.02	4.11	4.24	4.22	6.28	7.08	4.65	4.55	2.97	3.98	53.42
1945	3.11	2.64	3.16	4.30	4.58	3.32	5.64	7.56	8.30	5.98	6.17	4.71	59.47
Mean	3.31	2.93	4.51	4.74	5.38	5.67	7.83	7.42	7.16	6.27	5.74	3.96	64.92

* Pan located 25 to 30 feet north of caretaker's house.

[1] Incomplete.

[2] Partly estimated.

TABLE 236

EVAPORATION AT PALMDALE, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ------------------In Palmdale. Lat. 34° 35′ N., Long. 118° 07′ W.
  Elevation ------------------2,648 feet.
Evaporation pan:
  Type ----------------------Ground pan.
  Description ----------------Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data------------Los Angeles County Flood Control District.
Publication reference ---------Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	------	------	------	------	------	------	------	------	------	7.34	4.60	3.11	------
1932	2.86	2.10	6.50	8.11	10.67	12.70	16.61	17.14	13.02	8.14	4.69	2.87	105.41
1933	1.98	3.56	5.70	7.36	8.96	11.52	17.00	13.88	11.60	8.72	4.95	2.69	97.93
1934	2.79	3.68	6.29	9.30	12.70	12.34	16.16	15.64	10.95	6.78	3.54	1.80	101.97
1935	[1]1.58	2.64	3.86	6.76	10.72	15.54	16.36	13.40	11.72	7.70	4.12	3.12	97.52
1936	3.68	2.20	6.70	7.66	11.42	13.33	15.15	14.64	11.58	6.98	4.45	2.56	100.35
1937	2.08	2.44	4.06	6.22	9.92	12.08	15.96	14.76	10.96	7.08	4.82	2.71	93.09
1938	[1]2.78	2.38	4.32	6.48	11.12	14.62	15.77	14.18	10.02	------	------	------	------
Mean	2.54	2.71	5.35	7.41	10.79	13.03	16.14	14.81	11.41	7.53	4.45	2.69	98.86

[1] Incomplete.

TABLE 237

EVAPORATION AT PARDEE RESERVOIR, CALAVERAS COUNTY, CALIFORNIA

Station:
Location ____________________At Pardee Dam on Mokelumne River. Lat. 38° 15′ N., Long. 120° 51′ W.
Elevation ____________________670 feet.
Evaporation pan:
Type ____________________U. S. Weather Bureau pan.
Description ____________________Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data____________East Bay Municipal Utility District.
Publication reference ________U. S. Weather Bureau Climatological Data (41), Trans. Am. Soc. C. E. 99 (17).
Meteorologic data ____________Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	-------	3.25	4.69	7.30	10.37	12.38	10.78	6.43	4.50	2.21	0.86	-------
1931	0.76	1.30	2.94	5.20	9.05	10.03	14.27	11.26	7.91	4.41	2.02	.92	70.07
1932	.69	1.45	3.17	4.38	7.08	10.69	12.58	11.62	8.93	5.75	2.74	.62	69.70
1933	.58	1.97	2.93	5.25	7.60	11.35	15.19	12.80	8.32	6.40	2.17	.56	75.12
1934	.61	1.26	3.05	7.32	9.35	10.15	13.47	11.68	9.05	4.18	1.16	.71	71.99
1935	.60	1.49	[1]2.63	[1]3.09	6.48	9.76	10.57	10.27	6.79	3.78	1.15	.79	57.40
1936	.74	1.21	2.53	4.19	7.62	8.85	11.73	11.10	8.32	4.47	1.76	.65	63.17
1937	.82	1.26	2.32	4.38	7.71	9.38	11.71	11.07	7.49	3.87	1.38	.46	61.85
1938	.69	1.70	2.60	3.80	6.69	10.21	10.88	10.56	7.80	3.20	1.78	.64	60.55
1939	.84	1.85	2.32	4.94	7.93	10.64	11.87	10.05	7.48	3.71	1.83	.99	64.45
1940	.55	1.13	2.80	4.19	8.04	10.85	12.03	10.46	6.88	4.39	1.61	1.21	64.14
1941	.82	1.05	3.00	3.60	6.65	9.57	12.10	9.09	7.37	4.31	1.24	.78	59.58
1942	.76	1.44	2.99	3.12	5.70	9.73	11.78	9.63	7.04	4.64	1.19	.86	58.88
1943	.95	.90	1.73	3.18	7.78	9.01	11.46	10.21	6.86	3.37	1.56	.92	57.93
1944	1.10	1.37	3.16	2.81	7.24	7.60	11.30	10.43	7.80	3.80	.92	.56	58.09
1945	.68	1.12	1.55	4.39	5.86	9.48	11.40	10.56	7.97	3.52	.91	.45	57.89
Mean	.75	1.37	2.68	4.28	7.38	9.85	12.17	10.72	7.65	4.27	1.60	.75	64.37

[1] Partly estimated.

TABLE 238

EVAPORATION AT PARDEE RESERVOIR, CALAVERAS COUNTY, CALIFORNIA

Station:
  Location ____________________Pardee Reservoir on Mokelumne River, near outlet tower. Lat. 38° 15′ N., Long. 120° 51′ W.
  Elevation __________________Maximum 568 feet, minimum 393.5 feet, varies with reservoir level.
Evaporation pan:
  Type _______________________Floating pan.
  Description _______________Square, 3 x 3 feet, 18 inches deep.
Authority for data_____________East Bay Municipal Utility District.
Publication reference _________Trans. Am. Soc. C. E. Vol. 99 (17).
Meteorologic data ____________Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	-------	-------	-------	5.20	6.68	9.31	9.07	6.69	4.65	2.81	2.38	-------
1931	1.34	1.29	2.89	4.96	7.66	8.58	11.45	10.11	7.39	4.83	3.28	1.43	65.21
1932	1.19	1.15	2.53	3.91	5.74	7.57	9.89	9.93	7.53	6.24	4.01	3.33	63.02
1933	1.83	1.82	2.00	4.55	5.40	7.81	10.73	10.60	7.30	5.61	3.54	2.17	63.36
1934	1.39	1.34	2.67	5.05	7.21	8.22	10.73	9.93	8.41	5.30	2.64	2.05	64.94
1935	1.19	1.39	2.14	2.46	[1]6.10	7.48	9.68	9.66	7.75	4.84	3.53	2.40	58.62
1936	1.50	.89	2.62	3.47	6.74	7.10	9.77	10.29	7.78	5.12	3.48	2.46	61.22
1937	2.13	1.02	1.73	3.75	6.62	6.75	10.15	9.71	7.08	4.52	2.73	2.01	58.20
1938	1.58	.92	1.81	3.12	5.20	6.51	8.42	9.09	6.72	4.20	3.28	1.67	52.52
1939	1.46	2.02	2.28	4.65	6.36	8.89	10.51	9.98	7.19	4.48	3.13	1.69	62.64
1940	.79	.90	2.33	3.31	5.63	7.84	9.84	9.40	6.59	4.88	3.40	2.22	57.13
1941	1.32	.98	1.97	3.08	5.45	6.28	9.35	8.06	6.68	4.09	2.60	1.60	51.46
1942	1.32	1.62	2.50	2.48	4.55	7.53	9.40	9.22	6.59	5.18	3.07	1.96	55.42
1943	1.43	1.39	1.91	3.22	6.38	6.55	9.08	8.69	6.90	4.72	3.18	2.02	55.47
1944	1.95	1.74	2.77	3.27	5.81	6.46	-------	-------	-------	-------	-------	-------	-------
Mean	1.46	1.32	2.30	3.66	6.00	7.35	9.88	9.55	7.18	4.90	3.19	2.10	58.89

[1] Partly estimated.

TABLE 239

EVAPORATION AT PARDEE RESERVOIR, CALAVERAS COUNTY, CALIFORNIA

Station:
  Location ------------------At Pardee Dam on Mokelumne River. Lat. 38° 15′ N., Long. 120° 51′ W.
  Elevation -----------------670 feet.
Evaporation pan:
  Type ----------------------Ground pan.
  Description ---------------Square, 3 x 3 feet, depth 18 inches, set in ground 15 inches.
Authority for data-----------East Bay Municipal Utility District.
Publication reference -------Trans. Am. Soc. C. E. Vol. 99 (17).
Meteorologic data -----------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	-------	-------	-------	-------	-------	10.02	9.19	5.59	3.89	1.94	0.86	-------
1931	0.59	0.91	2.11	4.23	7.22	8.21	11.63	9.70	6.90	4.08	1.92	.45	57.95
1932	.67	1.13	2.46	3.61	5.72	8.77	11.04	9.97	7.53	4.82	2.46	.69	58.87
1933	.64	1.48	2.26	4.08	5.99	9.54	12.43	11.00	7.08	5.19	1.91	.56	62.16
1934	.54	.83	2.05	5.76	7.68	8.93	11.67	10.42	7.96	3.87	1.09	.74	61.54
1935	.48	1.05	2.02	2.73	5.88	8.55	9.24	9.00	6.41	3.36	1.27	.68	50.67
1936	.51	.70	2.05	3.26	6.54	7.13	9.51	9.49	7.34	3.80	1.61	.66	52.60
1937	.61	.85	1.54	3.83	6.49	7.58	9.62	9.35	6.90	3.44	1.20	.54	51.95
1938	.57	.94	1.67	2.93	5.50	8.20	9.05	8.91	6.52	3.16	1.59	.75	49.79
1939	.73	1.54	1.78	3.93	6.37	8.80	9.80	8.73	6.15	3.13	1.76	.76	53.48
1940	.68	1.16	1.76	3.06	6.96	9.00	10.29	8.91	6.20	4.03	1.68	1.16	54.89
1941	.66	.88	2.21	2.83	5.80	8.15	9.93	8.06	6.54	4.05	1.27	.82	51.20
1942	.77	1.27	2.50	2.70	4.75	8.06	9.84	8.46	6.48	3.90	1.14	1.08	50.95
1943	1.05	.96	1.91	3.04	7.05	7.96	9.84	8.95	6.37	3.26	1.44	.96	52.79
1944	1.02	1.37	3.03	2.71	5.78	6.80	-------	-------	-------	-------	-------	-------	-------
Mean	0.68	1.08	2.10	3.48	6.27	8.26	10.28	9.30	6.71	3.86	1.59	.76	54.37

TABLE 240

EVAPORATION AT PARDEE RESERVOIR, CALAVERAS COUNTY, CALIFORNIA

Station:
  Location ------------------At Pardee Dam on Mokelumne River. Lat. 38° 15′ N., Long. 120° 51′ W.
  Elevation -----------------670 feet.
Evaporation pan:
  Type ----------------------Ground pan.
  Description ---------------Diameter 6 feet, depth 2 feet, set in ground 21 inches.
Authority for data-----------East Bay Municipal Utility District.
Publication reference -------Trans. Am. Soc. C. E., Vol. 99 (17).
Meteorologic data -----------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	-------	2.50	3.71	5.91	8.21	9.99	9.03	5.20	3.32	1.53	0.63	-------
1931	0.46	0.75	2.03	4.07	6.79	7.53	10.45	8.92	6.14	3.36	1.64	.51	52.65
1932	.56	.93	2.19	3.38	5.53	8.50	10.20	9.10	6.89	4.01	1.83	.58	53.70
1933	.55	1.28	2.15	4.07	5.79	8.65	11.77	10.13	6.25	4.52	1.44	.47	57.07
1934	.38	.77	1.97	5.56	7.45	7.96	10.56	9.67	7.18	3.01	.96	.63	56.10
1935	.41	.80	1.85	2.86	5.71	8.31	9.04	8.70	5.58	2.68	.91	.51	47.36
1936	.51	.76	1.88	3.27	6.47	6.79	9.10	9.09	6.30	3.12	1.15	.48	48.92
1937	.52	.65	1.35	3.67	6.23	7.48	9.70	9.09	5.49	2.62	.87	.42	48.09
1938	.54	.88	1.75	2.94	5.36	8.23	8.85	8.49	5.56	2.22	1.20	.60	46.62
1939	.57	1.36	1.84	3.82	6.42	8.70	9.87	8.56	5.72	2.74	1.46	.80	51.86
1940	.53	.98	1.87	3.10	6.60	8.65	10.04	8.30	5.26	3.01	1.29	.92	50.55
1941	.51	.72	1.86	2.73	5.40	7.81	9.52	7.49	5.54	3.09	.98	.67	46.32
1942	.62	.99	2.10	2.24	4.48	7.58	9.16	8.09	5.35	3.05	1.02	.78	45.46
1943	1.13	.90	1.55	2.75	6.84	7.66	9.43	8.38	5.40	2.76	1.40	.86	49.06
1944	1.01	1.16	2.53	2.65	6.19	7.08	-------	-------	-------	-------	-------	-------	-------
Mean	0.59	0.92	1.96	3.39	6.08	7.94	9.83	8.79	5.85	3.11	1.26	.63	50.35

TABLE 241

TEMPERATURE AT PARDEE RESERVOIR, CALAVERAS COUNTY, CALIFORNIA[1]

Year	Mean temperature in ° F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	-------	56	60	61	74	78	76	68	64	57	48	-------
1931	48	52	56	63	70	70	85	81	70	63	52	46	63
1932	43	48	56	57	66	74	78	78	78	66	61	43	62
1933	41	46	54	58	60	70	83	79	71	71	58	46	61
1934	46	52	62	65	69	72	79	79	76	66	56	48	64
1935	46	49	50	58	65	76	78	81	74	64	53	50	62
1936	50	50	56	60	67	73	82	81	77	68	57	46	64
1937	38	48	54	56	67	72	81	80	74	67	57	50	62
1938	45	50	51	57	65	74	79	77	75	64	54	49	62
1939	47	46	52	63	66	73	79	78	76	65	59	52	63
1940	49	52	56	59	68	77	77	77	70	66	54	53	63
1941	50	53	56	56	65	70	80	74	71	64	57	50	62
1942	46	48	52	56	60	71	79	77	71	67	54	47	61
1943	47	51	54	57	67	68	76	75	74	64	57	49	62
1944	48	48	53	54	66	68	-------	-------	-------	-------	-------	-------	-------
Mean	46	50	54	59	65	72	80	78	73	66	56	48	62

[1] Data supplied by East Bay Municipal Utility District.

TABLE 242

WIND MOVEMENT AT PARDEE RESERVOIR, CALAVERAS COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	619	1,085	575	1,013	941	1,072	1,068	976	817	741	526	-------
1931	856	659	420	362	856	1,071	915	748	778	729	817	1,357	9,568
1932	1,083	818	880	696	627	946	1,059	852	696	743	498	719	9,617
1933	1,088	749	839	538	753	943	816	923	860	693	497	980	9,679
1934	696	753	351	738	722	855	852	715	585	580	539	558	7,944
1935	874	409	850	516	547	498	577	488	365	334	287	522	6,267
1936	771	919	438	370	657	747	790	844	696	681	421	712	8,046
1937	989	865	932	591	625	782	837	781	690	629	562	670	8,953
1938	808	1,370	1,150	465	544	681	701	735	552	518	512	278	8,314
1939	644	765	559	409	690	673	651	555	603	335	243	393	6,520
1940	464	599	314	157	-------	-------	1,104	839	846	652	564	1,116	-------
1941	1,053	958	896	662	762	972	916	875	778	761	541	1,177	10,351
1942	892	864	793	602	637	781	866	803	815	755	739	764	9,311
1943	855	656	643	392	798	926	964	950	733	759	557	747	8,980
1944	805	981	886	645	749	1,014	1,052	942	858	736	781	669	10,118
1945	652	846	823	615	841	811	906	962	829	854	695	933	9,767
Mean	835	802	741	521	721	843	880	818	729	661	562	758	8,871

[1] Data supplied by East Bay Municipal Utility District.

TABLE 243

EVAPORATION AT PASADENA, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	California Institute of Technology. Lat. 34° 08′ N., Long. 118° 07′ W.
Elevation	763 feet.
Evaporation pan:	
Type	Ground pan.
Description	Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data	Los Angeles County Flood Control District.
Publication reference	Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	-------	-------	-------	-------	-------	-------	-------	-------	-------	4.60	3.78	1.96	-------
1933	1.50	1.99	2.94	3.41	4.56	5.60	7.32	7.99	5.73	4.46	3.81	-------	-------
1934	-------	1.74	2.39	4.49	7.00	5.12	7.93	-------	-------	-------	-------	-------	-------
Mean	1.50	1.86	2.66	3.95	5.78	5.36	7.62	7.99	5.73	4.53	3.80	1.96	52.74

TABLE 244

EVAPORATION AT PASADENA, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	Corner Manzanita and Mentone Avenues, Pasadena. Lat. 34° 10′ N., Long. 118° 10′ W.*
Elevation	915 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	Pasadena Water Department.
Publication reference	None.
Meteorologic data	Wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1938	-------	-------	-------	-------	-------	-------	-------	-------	-------	4.43	3.59	2.61	-------
1939	2.02	3.15	2.93	4.82	5.59	7.23	7.73	7.86	6.67	4.75	2.64	2.05	57.44
1940	1.43	2.46	3.56	4.34	5.81	5.92	8.22	7.38	6.04	4.71	3.09	1.97	54.93
1941	1.69	1.66	3.41	3.96	6.47	5.63	7.71	6.29	5.40	4.10	3.16	1.60	51.08
1942	2.05	2.43	4.34	3.63	6.11	5.78	8.62	6.92	5.33	4.21	2.82	2.13	54.37
1943	2.12	2.60	2.56	4.38	6.23	7.09	8.15	7.73	6.63	4.32	3.42	1.91	57.14
1944	1.98	2.14	[1]3.35	4.53	4.66	5.07	6.45	7.84	5.34	3.64	1.87	2.00	48.87
1945	1.99	2.19	3.26	5.04	5.67	4.92	7.80	8.73	5.58	-------	-------	-------	-------
Mean	1.90	2.38	3.34	4.38	5.79	5.95	7.81	7.54	5.86	4.31	2.94	2.04	54.24

* Evaporation station surrounded by buildings from 75 to 300 feet distant.

[1] Estimated as average of all March values.

TABLE 245

EVAPORATION AT PASADENA, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	Corner of Manzanita and Mentone Avenues, Pasadena. Lat. 34° 10′ N., Long. 118° 10′ W.[1]
Elevation	915 feet.
Evaporation pan:	
Type	Ground pan.
Description	Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data	Pasadena Water Department.
Publication reference	None.
Meteorologic data	Wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1938	------	------	------	------	------	------	------	------	------	------	3.95	2.57	------
1939	1.63	2.60	2.53	4.64	5.98	8.10	8.81	8.89	7.22	4.86	2.73	1.99	59.98
1940	1.27	2.04	3.50	4.33	6.16	6.94	9.50	8.41	6.78	5.06	2.99	1.65	58.63
Mean	1.45	2.32	3.02	4.48	6.07	7.52	9.16	8.65	7.00	4.96	3.22	2.07	59.92

[1] Evaporation station surrounded by buildings from 75 to 300 feet distant.

TABLE 246

EVAPORATION AT PASADENA, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	Corner of Manzanita and Mentone Avenues, Pasadena. Lat. 34° 10′ N., Long. 118° 10′ W.[1]
Elevation	915 feet.
Evaporation pan:	
Type	Ground pan.
Description	Diameter 6 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data	Pasadena Water Department.
Publication reference	None.
Meteorologic data	Wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1938	------	------	------	------	------	------	------	------	------	3.38	3.19	2.17	------
1939	1.58	2.33	2.32	4.06	5.15	6.83	7.32	7.44	5.91	4.07	2.41	1.78	51.20
1940	1.10	1.89	3.18	3.88	5.50	6.04	8.04	7.25	5.93	4.50	2.69	1.54	51.54
1941	1.32	1.33	2.52	3.46	5.81	5.63	7.34	6.20	5.30	3.91	2.64	1.54	47.00
1942	1.59	2.08	3.67	3.36	5.84	5.70	8.37	7.05	5.30	4.19	2.58	1.90	51.63
1943	1.69	1.97	2.19	3.93	5.70	6.45	7.73	7.50	6.18	4.37	3.11	1.54	52.36
1944	1.47	1.69	1.91	4.11	4.33	4.80	6.58	7.53	5.41	3.66	1.95	1.77	45.21
1945	1.66	1.79	2.58	4.21	5.52	4.75	7.14	8.00	5.56	------	------	------	------
Mean	1.49	1.87	2.62	3.86	5.41	5.74	7.50	7.28	5.65	4.01	2.65	1.75	49.83

[1] Evaporation station surrounded by buildings from 75 to 300 feet distant.

TABLE 247

EVAPORATION AT PASADENA, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ____________________ Corner of Manzanita and Mentone Avenues, Pasadena. Lat. 34° 10′ N., Long. 118° 18′ W.
  Elevation ___________________ 915 feet.
Evaporation pan:
  Type ________________________ Shallow black pan evaporimeter.
  Description _________________ Diameter 2 feet, depth 0.7 inch, painted black, mounted on a Fergusson rain gage recording mechanism.
Authority for data ____________ Pasadena Water Department.
Publication reference _________ None.
Meteorologic data _____________ Wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1938	------	------	------	------	------	------	------	------	------	4.42	3.71	2.71	------
1939	2.33	3.32	3.43	5.53	5.86	7.73	7.92	7.90	6.81	5.05	3.01	2.40	61.29
1940	1.54	2.69	4.02	4.86	6.45	6.72	6.55	5.81	6.39	4.88	3.22	2.16	55.29
Mean	1.94	3.00	3.72	5.20	6.16	7.22	7.24	6.86	6.60	4.78	3.31	2.42	58.45

TABLE 248

WIND MOVEMENT AT PASADENA, LOS ANGELES COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1938	------	------	------	------	------	------	------	------	------	------	618	799	------
1939	709	1,224	885	967	1,002	1,065	1,048	1,007	907	700	456	420	10,390
1940	502	738	653	644	647	784	896	770	645	524	370	485	7,658
1941	425	665	644	769	404	------	------	------	------	------	------	------	------
Mean	545	876	727	793	684	924	972	888	776	612	481	568	8,846

[1] Anemometer cups about 8 inches above top of Weather Bureau pan.

TABLE 249

EVAPORATION AT PATTERSON, STANISLAUS COUNTY, CALIFORNIA

Station:	
Location	One mile northeast of Patterson. Lat. 37° 29′ N., Long. 121° 08′ W.
Elevation	Approx. 100 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches set on 2 x 4 inch timber grill.
Authority for data	Emergency Rubber Project, Forest Service, U. S. Dept. of Agric.
Publication reference	None.
Meteorologic data	Temperature, wind.

Month	Evaporation in inches		Mean temperature in ° F.		Total wind in miles	
	1944	1945	1944	1945	1944	1945
January				45		2,004
February		3.46		53		2,521
March		4.26		52		2,117
April		8.03		61		3,066
May		7.28		63		1,667
June		10.61		74		2,367
July		11.28		78		1,761
August	11.16	9.83		73	1,633	1,191
September	10.43	9.18		73	1,787	1,687
October	5.63	4.51		65	1,408	1,395
November	2.95	1.90	52	51	2,011	1,031
December	1.10		46		1,425	
Annual						

TABLE 250

EVAPORATION AT PICKENS DEBRIS BASIN, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	Pickens Wash. Lat. 34° 13′ N., Long. 118° 14′ W.[1]
Elevation	Approx. 1,600 feet.
Evaporation pan:	
Type	Ground pan.
Description	Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data	Los Angeles County Flood Control District.
Publication reference	Annual Reports Los Angeles County Flood Control District (28).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1941										4.83	3.96	1.61	
1942	2.20	3.13	3.94	3.53	6.44	6.62	10.74	8.42	7.03	5.59	3.72	2.80	64.16
1943	2.86	2.54	2.12	3.86	7.41	8.81	9.38	9.05	9.42	6.15	4.34	2.29	68.32
1944	2.30	2.23	4.45	5.73		5.94	9.19	5.58	9.57	4.62	2.74	2.44	
1945	2.40	2.40	3.88	5.76	4.94	3.03	5.98	6.98	5.80	3.29	3.55	2.01	50.02
Mean	2.44	2.58	3.60	4.72	6.26	6.10	8.82	7.51	7.96	4.90	3.66	2.23	60.78

[1] Evaporation pan located on a ridge with open exposure.

TABLE 251

EVAPORATION AT PINE CANYON PATROL, LOS ANGELES COUNTY, CALIFORNIA

Station:
- Location ------------------At County Forestry Guard Station between Elizabeth and Hughes Lakes. Lat. 34° 40′ N., Long. 118° 26′ W.*
- Elevation ------------------3,275 feet.

Evaporation pan:
- Type ------------------Ground pan.
- Description ------------------Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.

Authority for data------------------Los Angeles County Flood Control District.

Publication reference ------------------Annual Reports Los Angeles County Flood Control District (28).

Meteorologic data ------------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932---	1.78	[1]2.64	6.70	8.70	9.35	11.52	16.30	15.53	12.42	8.67	6.51	2.96	103.08
1933---	1.72	3.48	5.67	6.35	7.76	9.82	12.79	12.25	10.32	8.32	6.20	3.10	87.78
1934---	3.96	3.13	6.43	8.46	10.61	8.70	13.08	12.18	10.06	6.51	3.63	3.19	89.94
1935---	2.80	3.38	3.71	4.85	7.20	14.08	12.45	10.52	9.84	7.50	3.94	2.62	82.89
1936---	2.64	2.22	5.14	6.28	8.88	10.48	11.55	11.66	9.40	6.44	4.72	2.54	81.95
1937---	[2]1.36	1.68	3.10	5.60	6.72	8.48	12.05	10.78	8.08	5.66	2.92	3.11	69.54
1938---	2.48	1.62	2.62	4.92	6.00	8.12	9.72	9.06	7.22	4.53	3.78	2.56	62.63
1939---	1.71	2.52	3.56	5.04	6.71	9.36	10.28	9.72	6.45	5.00	2.68	1.62	64.65
1940---	1.34	2.04	4.05	5.24	8.33	9.42	10.14	10.22	7.70	4.70	2.40	2.10	67.68
1941---	1.19	1.22	2.91	2.92	6.68	7.74	10.06	9.54	7.55	4.09	2.46	1.18	57.54
1942---	[2]2.66	[2]2.65	5.00	5.06	8.30	11.77	14.08	11.96	9.05	7.24	4.62	3.18	85.57
1943---	2.76	3.04	3.84	5.52	10.45	10.15	12.20	12.00	10.10	6.88	4.88	4.57	86.39
1944---	3.00	3.79	5.47	6.28	7.88	8.15	12.32	12.82	10.92	7.40	3.88	3.06	84.97
1945---	3.24	3.52	2.70	7.37	9.32	9.74	12.06	11.47	9.20	6.01	3.96	3.03	81.62
Mean--	2.33	2.64	4.35	5.90	8.16	9.82	12.08	11.41	9.17	6.35	4.04	2.77	79.02

* Evaporation pan subject to desert conditions; Elizabeth Lake nearby.

[1] Estimated.

[2] Incomplete.

TABLE 252

EVAPORATION AT POMONA, LOS ANGELES COUNTY, CALIFORNIA

Station:
- Location ------------------At California Agricultural Experiment Sub-station. Lat. 34° 03′ N., Long. 117° 49′ W.
- Elevation ------------------861 feet.

Evaporation pan:
- Type ------------------Ground pan.
- Description ------------------Circular; exact diameter unknown but between 22 and 36 inches, depth 30 inches, set in ground 29 inches.

Authority for data------------------Office of Experiment Stations, U. S. Dept. of Agriculture.

Publication reference ------------------U. S. Dept. of Agric., Office of Experiment Stations Bull. 177 (13).

Meteorologic data ------------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1903---	------	------	------	------	------	------	9.07	9.37	6.29	6.63	4.25	2.51	------
1904---	2.78	2.57	3.69	5.00	6.50	8.20	9.34	9.37	7.23	5.37	4.05	2.94	67.04
1905---	1.93	1.65	3.73	4.08	5.98	7.73	8.93	9.02	7.45	5.28	[1]4.05	[1]2.94	62.77
Mean--	2.36	2.11	3.71	4.54	6.24	7.96	9.11	9.25	6.99	5.76	4.12	2.80	64.95

[1] Interpolated from previous year's record.

TABLE 253

EVAPORATION AT POMONA, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	Top of 5-story building in Pomona business district. Lat. 34° 03′ N., Long. 117° 45′ W.
Elevation	Approx. 900 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	Div. of Irrig., SCS, U. S. Dept. of Agric.
Publication reference	None.
Meteorologic data	Temperature, wind.

Month	Evaporation in inches		Mean temperature in ° F.		Total wind in miles	
	1933	1934	1933	1934	1933	1934
January	----------	4.64	----------	56	----------	1,933
February	----------	3.29	----------	55	----------	1,653
March	----------	7.00	----------	63	----------	2,540
April	----------	7.89	----------	64	----------	2,908
May	----------	10.19	----------	66	----------	3,426
June	----------	----------	----------	65	----------	3,278
July	12.03	12.37	73	74	3,913	3,587
August	10.72	11.09	73	73	3,370	3,408
September	7.22	9.89	66	73	2,723	2,681
October	6.18	----------	67	----------	2,260	----------
November	6.71	----------	63	----------	1,995	----------
December	2.89	----------	54	----------	2,210	----------

TABLE 254

EVAPORATION AT POMONA, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	In residential district. Lat. 34° 04′ N., Long. 117° 45′ W.[1]
Elevation	Approx. 900 feet.
Evaporation pan:	
Type	Shallow black pan evaporimeter.
Description	Diameter 24 inches, depth 0.7 inch, attached to the weighing mechanism of a Fergusson recording rain gage.
Authority for data	Div. of Irrig., SCS, U. S. Dept. of Agric.
Publication reference	None.
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	2.07	2.41	5.02	6.76	7.49	8.43	9.86	9.43	7.43	5.14	5.17	2.56	71.77
1933	2.81	4.21	5.71	6.00	7.70	8.94	10.09	8.93	6.05	5.47	4.87	2.37	73.15
1934	3.35	2.52	6.03	6.83	8.89	6.62	9.95	8.99	7.77	4.68	2.99	2.26	70.88
1935	2.66	4.17	4.47	5.15	6.57	8.35	10.69	9.74	7.29	5.50	3.73	3.03	71.35
1936	3.12	2.55	5.17	6.18	8.69	9.91	10.17	9.93	7.39	4.95	4.18	2.13	74.37
1937	1.48	2.65	4.97	6.64	6.29	8.42	9.76	9.26	7.72	5.55	2.82	2.91	68.47
1938	3.30	2.72	4.51	5.77	7.71	7.51	9.77	9.33	8.01	5.14	4.22	2.87	70.86
1939	2.71	3.81	4.24	6.22	7.30	9.21	9.69	9.16	6.50	-------	-------	-------	-------
Mean	2.69	3.13	5.02	6.19	7.58	8.42	10.00	9.35	7.27	5.20	4.00	2.59	71.44

[1] Location of the evaporimeter was on top of a garage to give it better exposure than would be possible under backyard surface conditions. In 1932 the evaporimeter was located at Ontario from Jan. 1 to Feb. 23 and at Pomona thereafter except for the period Sept. 8-15 when it was located at Arrowhead Springs.

TABLE 255

EVAPORATION AT PRADO BASIN EVAPORATION STATION, RIVERSIDE COUNTY, CALIFORNIA

Station:
  Location ------------------On Santa Ana River above Prado Dam site. Lat. 33° 53′ N., Long. 117° 38′ W.[1]
  Elevation ------------------Approx. 480 feet.
Evaporation pan:
  Type ------------------U. S. Weather Bureau pan.
  Description ------------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data------------------Div. of Irrig., SCS, U. S. Dept. of Agric. and Orange County Flood Control District.
Publication reference ------------------Calif. Dept. of Pub. Wks. Bull. No. 44 (6).
Meteorologic data ------------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	-------	-------	-------	-------	-------	11.00	9.85	-------	-------	5.02	3.80	-------
1931	4.03	2.43	5.75	6.08	7.76	9.12	11.52	9.86	7.63	5.39	3.56	2.50	75.63
1932	4.21	-------	5.17	6.03	8.18	9.14	9.98	10.47	7.05	6.00	5.39	2.75	-------
1933	3.13	4.39	5.26	5.43	7.51	9.02	10.64	9.48	7.39	5.43	4.45	2.24	74.37
1934	3.93	2.72	4.90	6.33	9.13	7.17	10.12	8.84	7.72	4.69	2.56	2.04	70.15
1935	2.06	2.71	3.56	4.66	6.71	8.50	10.46	8.95	7.32	5.46	3.38	3.36	67.13
1936	3.21	3.07	4.54	5.18	7.74	10.15	11.22	10.07	8.00	5.11	4.14	2.72	75.15
1937	1.61	2.27	3.68	5.82	6.74	9.08	10.08	9.07	8.06	5.47	2.75	3.03	67.66
1938	(Statio	n destro	yed by	flood)	-------	-------	10.04	9.26	7.75	5.40	5.96	3.55	-------
1939	2.58	3.43	3.58	5.42	7.04	8.56	9.50	8.71	6.66	5.32	2.77	2.26	65.93
1940	1.63	2.74	4.49	4.15	6.86	7.27	8.45	8.03	6.40	4.50	3.88	2.14	60.54
Mean	2.94	2.97	4.55	5.46	7.52	8.67	10.27	9.33	7.40	5.28	3.99	2.76	71.14

[1] Station adjacent to tall willow brush along Santa Ana River.

TABLE 256

TEMPERATURE AT PRADO BASIN EVAPORATION STATION, RIVERSIDE COUNTY, CALIFORNIA

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	-------	-------	-------	-------	65	72	73	66	62	58	-------	-------
1931	-------	-------	-------	-------	66	69	79	77	71	65	53	-------	-------
1932	-------	-------	-------	-------	-------	66	70	71	69	63	61	50	-------
1933	[1]48	50	54	56	58	65	72	72	65	65	58	52	60
1934	54	56	61	63	66	65	74	73	71	65	[2]56	[3]56	63
1935	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
1936	54	54	57	59	63	68	74	74	68	63	60	52	62
1937	42	52	55	59	64	66	72	72	70	63	57	56	61
1938	55	52	-------	(Statio	n destro	yed by	flood)	-------	-------	-------	-------	-------	-------
Mean	51	53	57	59	63	66	73	73	68	64	58	53	62

[1] Four days missing.
[2] Eight days missing.
[3] Seven days missing.

TABLE 257

WIND MOVEMENT AT PRADO BASIN EVAPORATION STATION, RIVERSIDE COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	------	------	------	------	------	------	2,034	1,858	1,540	1,232	1,438	1,950	------
1931	1,738	979	1,373	1,646	1,970	1,840	2,240	1,922	1,496	1,249	1,257	1,223	18,933
1932	1,679	1,217	1,512	1,313	2,116	2,285	2,418	2,304	1,892	1,743	1,398	1,578	21,455
1933	1,822	2,149	1,877	1,848	2,063	2,124	1,613	2,285	1,818	1,608	1,476	1,197	21,880
1934	1,874	1,246	1,402	1,518	2,023	2,043	2,047	2,059	1,598	1,201	1,917	886	19,814
Mean	1,778	1,398	1,541	1,581	2,043	2,073	2,070	2,086	1,669	1,407	1,497	1,367	20,510

[1] Anemometer cups about 6 inches above top of evaporation pan.

TABLE 258

EVAPORATION AT PRADO DAM, RIVERSIDE COUNTY, CALIFORNIA

Station:
  Location ------------------On south bank of Santa Ana River below Prado Dam. Lat. 33° 53′ N., Long. 117° 38′ W.
  Elevation ------------------Approx. 460 feet.
Evaporation pan:
  Type ----------------------U. S. Weather Bureau pan.
  Description ----------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data------------Orange County Flood Control District.
Publication reference ---------None.
Meteorologic data ------------Wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1941	2.61	2.39	4.50	5.31	8.87	8.87	11.08	8.69	6.91	5.84	5.36	2.84	73.27
1942	4.59	4.29	6.98	5.15	10.60	9.58	12.41	12.11	8.66	7.02	5.82	4.11	91.32
1943	5.73	5.10	4.35	5.84	9.53	10.31	12.10	11.33	9.23	6.55	6.52	4.20	90.79
1944	4.47	3.17	7.16	7.01	8.30	9.29	10.70	9.02	6.43	5.81	3.59	3.45	78.40
1945	1.93	3.41	5.23	7.56	8.64	8.59	11.65	10.94	9.25	4.58	4.60	3.20	79.58
Mean	3.87	3.67	5.64	6.17	9.19	9.33	11.59	10.42	8.10	5.96	5.18	3.56	82.68

TABLE 259

WIND MOVEMENT AT PRADO DAM, RIVERSIDE COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1944	------	------	------	3,708	3,931	3,649	4,198	4,406	3,896	3,074	3,677	2,694	------
1945	2,470	2,909	3,552	3,374	4,252	4,195	4,316	3,650	3,089	2,983	2,678	2,632	40,100
Mean	2,470	2,909	3,552	3,541	4,092	3,922	4,257	4,028	3,492	3,028	3,178	2,663	41,132

[1] Greater wind movement occurring at Prado Dam station than at Prado Basin appears to account for the difference in evaporation.

TABLE 260

EVAPORATION AT PUDDINGSTONE DAM, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ------------------One and one-half miles south of San Dimas. Lat. 34° 06′ N., Long. 117° 48′ W.[1]
  Elevation -----------------1,030 feet.
Evaporation pan:
  Type ----------------------Ground pan.
  Description ---------------Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data------------Los Angeles County Flood Control District.
Publication reference ---------Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1929---	-------	-------	-------	-------	-------	-------	-------	-------	6.99	7.90	7.73	5.32	-------
1930---	2.29	2.76	3.60	4.52	4.64	6.73	11.65	10.52	7.37	7.43	3.30	5.24	70.05
1931---	3.25	1.67	5.78	5.27	5.86	7.29	10.17	9.16	8.66	6.04	3.74	2.32	69.21
1932---	2.24	1.60	4.20	5.47	5.50	6.65	9.42	9.30	6.70	6.53	6.76	3.38	67.75
1933---	3.30	3.88	5.32	5.18	6.16	7.25	10.06	9.38	6.58	6.99	7.32	4.18	75.60
1934---	4.10	2.68	4.44	4.74	8.82	6.39	9.99	9.67	8.55	6.46	3.67	3.50	73.01
1935---	2.72	2.65	3.32	3.84	5.73	6.72	9.48	9.84	7.68	6.68	5.19	4.35	68.20
1936---	3.96	2.46	3.87	4.66	7.61	8.60	10.10	10.78	9.24	7.38	6.72	3.91	79.29
1937---	2.35	2.15	3.33	5.50	5.76	7.58	10.24	9.72	8.95	6.96	4.33	3.88	70.75
1938---	3.52	2.18	3.00	3.82	4.82	6.50	9.30	9.76	8.88	7.41	6.34	4.26	69.79
1939---	3.00	3.37	2.98	5.02	5.85	8.58	10.12	8.64	7.64	6.33	4.42	3.86	69.81
1940---	2.03	2.60	3.69	3.80	4.45	4.79	7.30	8.30	6.94	6.28	4.92	5.02	60.12
1941---	3.72	2.58	3.66	3.65	5.95	5.95	8.94	7.78	5.62	5.32	5.28	3.36	61.81
1942---	3.98	3.08	4.10	2.88	4.30	5.02	7.75	8.40	6.52	6.08	4.30	3.72	60.13
1943---	3.38	3.30	2.95	3.78	5.68	7.25	8.72	7.38	7.42	5.60	4.92	2.02	62.40
1944---	2.12	1.96	2.87	3.52	4.30	4.99	6.91	8.00	5.98	4.52	2.60	3.16	50.93
1945---	2.55	3.08	2.06	3.30	5.48	4.88	7.43	7.54	7.12	4.36	4.12	2.92	53.84
Mean--	2.97	2.56	3.70	4.31	5.68	6.57	9.22	9.01	7.46	6.37	5.04	3.79	66.68

[1] Location on a knoll 125 feet east of dam in rolling hill country.

TABLE 261

EVAPORATION AT PUENTE HILLS, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ------------------ On Anaheim Road one mile north of Whittier Boulevard. Lat. 33° 57′ N., Long. 117° 55′ W.*
Elevation ------------------ 675 feet.
Evaporation pan:
Type ---------------------- Ground pan.
Description ---------------- Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data------------ Los Angeles County Flood Control District.
Publication reference --------- Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------ None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	-------	7.56	6.66	4.72	3.22	1.84	-------
1932	1.16	0.80	2.53	5.58	4.88	5.78	6.76	6.90	5.34	4.50	4.90	2.32	51.45
1933	2.26	3.06	3.20	3.73	4.95	5.53	6.50	6.30	5.21	4.50	4.55	2.38	52.17
1934	2.59	1.60	2.70	4.67	6.36	4.46	6.74	6.60	6.46	3.87	2.11	1.52	49.68
1935	1.46	1.84	1.60	2.60	4.08	5.19	6.86	6.92	5.26	4.70	3.08	2.80	46.39
1936	2.50	1.46	2.70	3.42	5.64	5.94	6.88	7.04	5.74	4.16	4.28	2.24	52.00
1937	1.62	1.26	2.30	3.41	4.10	5.53	6.42	6.76	6.12	4.30	2.56	2.97	47.35
1938	2.85	1.60	2.44	3.47	4.24	5.04	6.44	6.80	6.36	4.58	4.48	2.63	50.93
1939	1.74	2.52	2.75	-------	-------	[1]5.84	6.24	5.85	[1]5.35	3.90	2.46	1.64	-------
1940	-------	[1]1.43	[1]2.87	[1]3.21	4.58	4.42	6.55	5.96	4.93	3.66	2.47	1.38	-------
1941	.94	.44	1.85	2.54	4.76	4.50	6.01	5.32	4.34	3.42	2.30	.97	-------
1942	1.63	1.76	3.61	2.37	4.69	4.15	6.84	5.73	3.80	3.18	2.98	1.38	42.12
1943	1.06	1.60	1.37	2.60	4.46	5.05	5.52	5.68	4.20	2.75	2.81	.73	37.83
1944	1.29	.94	2.54	3.44	3.55	3.95	4.86	5.57	3.82	2.32	1.09	1.72	-------
1945	1.01	1.03	2.08	3.47	4.31	3.38	4.94	5.34	4.68	3.08	2.04	1.60	-------
Mean	1.70	1.52	2.47	3.42	4.66	4.91	6.25	6.29	5.22	3.84	3.02	1.87	45.17

* Located in rolling, citrus area. A local change in position of the station occurred in May 1939.
[1] Partly estimated.

TABLE 262

EVAPORATION AT RADIUM HOT SPRINGS, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ------------------ In Elizabeth Lake Canyon, north of Saugus. Lat. 34° 36′ N., Long. 118° 33′ W.*
Elevation ------------------ 2,041 feet.
Evaporation pan:
Type ---------------------- Ground pan.
Description ---------------- Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data------------ Los Angeles County Flood Control District.
Publication reference --------- Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------ None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	5.31	3.82	-------
1933	-------	4.10	5.22	5.70	8.00	10.60	13.58	13.46	11.50	9.84	9.57	3.93	-------
1934	3.70	2.46	6.00	8.58	9.86	7.84	12.86	11.60	8.94	6.93	4.27	3.16	86.20
1935	2.48	3.20	3.56	4.91	6.24	10.08	11.46	10.60	9.50	7.34	3.70	3.41	76.48
1936	3.14	1.68	4.98	5.85	8.74	10.10	11.58	11.30	9.70	6.63	4.88	2.71	81.29
1937	1.14	2.12	3.47	6.26	6.48	9.19	11.66	11.28	9.37	7.09	4.06	3.20	75.32
1938	3.12	1.94	3.36	5.50	6.46	7.99	11.16	10.68	8.97	6.03	5.50	3.54	74.25
1939	2.50	3.18	3.66	5.87	7.56	9.66	10.95	[1]10.68	-------	-------	-------	-------	-------
Mean	2.68	2.67	4.32	6.10	7.62	9.35	11.89	11.37	9.66	7.31	5.33	3.40	81.70

* Located on rolling land in Elizabeth Lake Canyon.
[1] Partly estimated.

TABLE 263

EVAPORATION AT SALINAS RESERVOIR SITE, SAN LUIS OBISPO COUNTY, CALIFORNIA

Station:
  Location ------------------ In Upper Salinas Valley about 4 miles easterly from San Luis Obispo. Lat. 35° 20′ N., Long. 120° 30′ W.
  Elevation ------------------ 1,366 feet.
Evaporation pan:
  Type ------------------ Ground pan.
  Description ------------------ Square, 10 x 10 feet, depth 2.5 feet, set in ground 2.4 feet.
Authority for data ------------------ U. S. Engineer Office, Los Angeles, California.
Publication reference ------------------ None.
Meteorologic data ------------------ Temperature.

Month	Evaporation in inches					Mean temperature in ° F.[1]				
	1942	1943	1944	1945	Mean	1942	1943	1944	1945	Mean
January	--------	--------	1.26	1.43	1.34	--------	53	53	53	53
February	--------	0.75	1.29	1.62	1.22	--------	56	51	54	54
March	--------	1.25	3.71	2.47	2.48	--------	57	57	51	55
April	--------	2.09	3.97	4.70	3.59	--------	57	54	56	56
May	--------	6.93	5.40	5.96	6.10	--------	61	57	57	58
June	--------	7.63	6.45	7.13	7.07	--------	62	61	62	62
July	--------	7.87	8.11	8.92	8.30	--------	65	64	66	65
August	8.41	7.69	8.46	8.34	8.16	63	64	64	65	64
September	5.79	6.44	6.49	6.52	6.48	63.	66	65	66	65
October	4.33	4.33	4.32	--------	4.32	64	62	62	63	63
November	2.19	2.78	1.46	--------	2.12	59	61	56	57	58
December	1.57	1.20	1.18	--------	1.19	55	55	54	54	54
Annual	--------	--------	52.10	--------	52.37	--------	60	58	59	59

[1] From San Luis Obispo records in U. S. Weather Bureau Climatological Data. (41)

TABLE 264

EVAPORATION AT SALT SPRINGS RESERVOIR, AMADOR COUNTY, CALIFORNIA

Station:
  Location ------------------ On North Fork of Mokelumne River about 40 miles above Jackson, California. Lat. 38° 30′ N., Long. 120° 12′ W.
  Elevation ------------------ Approx. 3,650 feet.
Evaporation pan:
  Type ------------------ U. S. Weather Bureau pan.
  Description ------------------ Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data ------------------ Pacific Gas and Electric Company.
Publication reference ------------------ None.
Meteorologic data ------------------ Temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	-------	-------	-------	-------	-------	8.65	10.48	9.99	9.06	5.46	3.66	1.80	-------
1933	-------	-------	3.41	5.87	5.26	7.88	12.24	11.50	7.89	6.43	4.06	2.01	-------
1934	2.68	2.15	5.48	7.21	7.91	7.54	12.35	11.80	9.14	5.11	1.71	2.94	76.02
1935	1.76	2.45	3.17	4.79	7.86	9.56	10.70	11.17	9.32	5.02	2.80	2.21	70.81
1936	1.82	1.52	5.58	5.48	8.12	6.89	10.21	11.33	9.45	6.47	4.77	2.15	73.79
1937	-------	1.71	2.51	5.36	8.28	7.47	11.03	10.84	8.53	5.61	1.89	2.71	-------
1938	1.96	1.12	1.04	4.44	6.71	8.13	9.83	10.11	7.82	3.80	2.96	2.40	60.32
1939	2.26	2.64	3.30	7.29	7.31	9.30	11.93	11.77	7.21	5.68	3.62	2.12	74.43
1940	2.02	1.38	4.03	5.11	8.18	9.22	10.96	11.01	6.12	4.50	2.36	2.21	67.10
1941	1.59	1.48	3.96	4.06	6.21	6.55	10.04	8.13	7.20	4.37	2.45	.81	56.85
1942	1.84	1.92	3.94	3.85	5.44	8.55	9.99	9.79	7.49	-------	-------	-------	-------
1943	-------	-------	-------	-------	-------	-------	-------	10.81	9.09	4.60	3.38	1.81	-------
1944	1.70	1.80	4.55	4.19	7.32	6.34	10.52	11.22	9.48	5.27	1.97	-------	-------
1945	2.03	2.20	2.44	6.64	4.82	8.31	11.81	10.04	9.33	4.96	-------	-------	-------
Mean	1.97	1.85	3.62	5.36	6.95	8.03	10.93	10.68	8.37	5.18	2.97	2.11	68.02

TABLE 265

TEMPERATURE AT SALT SPRINGS RESERVOIR, AMADOR COUNTY, CALIFORNIA[1]

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	-------	-------	-------	-------	-------	65	71	73	74	61	57	40	-------
1933	39	43	48	53	51	64	78	76	67	67	57	46	57
1934	49	48	52	60	61	61	74	76	71	61	50	46	59
1935	41	46	41	50	58	68	71	75	72	58	48	46	56
1936	44	41	52	55	60	65	74	75	69	61	57	43	58
1937	30	41	46	50	62	64	75	74	69	62	50	48	56
1938	46	40	40	51	59	67	74	73	69	56	49	48	56
1939	45	39	48	58	59	66	74	76	67	59	54	49	58
1940	45	44	49	53	62	71	71	74	63	58	49	46	57
1941	42	45	50	47	58	56	73	69	63	55	53	41	54
1942	41	40	47	48	53	63	73	72	65	60	49	44	54
1943	43	42	46	55	59	59	72	69	71	57	52	52	56
1944	42	40	47	46	58	58	70	72	70	60	44	45	54
1945	43	43	40	52	54	63	74	71	69	59	-------	-------	-------
Mean	42	42	47	52	58	64	73	73	68	60	51	46	56

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[1] Records by Pacific Gas and Electric Company.

TABLE 266

EVAPORATION AT SAN BERNARDINO, SAN BERNARDINO COUNTY, CALIFORNIA

Station:

Location ------------------ At Antil Pumping Plant, 1½ miles east of San Bernardino. Lat. 34° 07′ N., Long. 117° 16′ W.

Elevation ------------------ Approx. 1,050 feet.

Evaporation pans:

Type and description-------- (1) U. S. Weather Bureau pan.

Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.

(2) Ground pan.

Diameter 23 inches, depth 32 inches, set in ground 29 inches.

Authority for data------------- Div. of Irrig. SCS, U. S. Dept. of Agric.

Publication reference ---------- Calif. Dept. of Pub. Wks. Bulls. No. 33, 44, and 50 (5) (6) (45).

Meteorologic data ------------ Temperature, wind.

Month	Evaporation from U. S. Weather Bureau pan in inches					Evaporation from ground pan in inches				
	1929	1930	1931	1932	Mean	1929	1930	1931	1932	Mean
January	--------	2.32	3.10	3.13	2.85	--------	2.22	2.79	3.01	2.67
February	--------	3.46	3.06	3.13	3.22	--------	2.68	2.25	2.89	2.61
March	--------	5.02	5.77	5.24	5.34	--------	3.91	4.95	4.23	4.36
April	--------	5.38	4.89	6.28	5.52	--------	5.40	4.06	5.10	4.85
May	7.78	5.50	6.79	--------	6.69	6.09	4.57	4.85	--------	5.17
June	8.89	6.59	7.38	--------	7.62	7.60	5.98	5.73	--------	6.44
July	9.78	8.08	8.92	--------	8.93	8.89	6.80	6.73	--------	7.47
August	8.81	7.54	8.06	--------	8.14	7.74	5.84	6.89	--------	6.82
September	5.69	5.47	5.81	--------	5.66	5.43	5.12	5.45	--------	5.33
October	5.58	5.21	4.81	--------	5.20	5.44	4.86	4.60	--------	4.97
November	4.98	3.77	3.48	--------	4.08	4.70	3.51	2.67	--------	3.63
December	3.82	2.63	2.10	--------	2.85	3.48	2.65	2.79	--------	2.97
Annual	--------	60.97	64.17	--------	66.10	--------	53.54	53.76	--------	57.29

TABLE 267

TEMPERATURE AND WIND MOVEMENT AT SAN BERNARDINO, SAN BERNARDINO COUNTY, CALIFORNIA[1] (6)

Month	Mean temperature in ° F.				Total wind in miles				
	1929	1930	1931	Mean	1929	1930	1931	1932	Mean
January	--------	49	52	50	--------	1,434	--------	902	1,168
February	--------	56	53	54	--------	1,357	--------	1,168	1,262
March	--------	56	57	56	--------	1,864	--------	1,391	1,628
April	--------	61	62	62	--------	1,143	--------	1,391	1,267
May	65	59	68	64	--------	947	--------	--------	947
June	69	69	70	69	--------	900	748	--------	824
July	76	75	80	77	--------	679	798	--------	738
August	79	76	78	78	--------	879	890	--------	884
September	72	67	70	70	1,012	895	816	--------	908
October	66	63	64	64	1,183	1,086	797	--------	1,022
November	57	58	53	56	1,589	1,257	1,177	--------	1,341
December	54	50	--------	52	1,255	--------	1,013	--------	1,134
Annual	--------	62	64	63	--------	--------	--------	--------	13,123

[1] Anemometer cups set about 6 inches above top of the Weather Bureau pan.

TABLE 268

EVAPORATION AT SAN DIEGUITO RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ------------------On Little San Elijo Creek, southerly from Escondido. Lat. 33° 02′ N., Long. 117° 12′ W.
  Elevation ------------------250 feet.
Evaporation pan:
  Type ----------------------Ground pan.
  Description ----------------Square, 3 x 3 feet, depth 18 inches, set in ground 15 inches.
Authority for data-------------San Dieguito Mutual Water Company.
Publication reference ----------Unpublished report by George Cromwell, Engineer, for San Diego County Water Company (11).
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1920	-------	2.45	2.39	4.05	5.20	-------	-------	-------	5.20	4.46	-------	2.23	-------
1921	1.99	2.24	3.57	5.72	5.92	6.05	7.92	7.24	5.99	3.59	2.90	3.67	56.80
1922	2.66	1.35	2.74	4.03	5.63	5.94	6.70	6.64	5.75	4.20	2.82	1.95	50.41
1923	2.01	2.50	3.96	3.73	6.18	-------	-------	-------	-------	-------	-------	-------	-------
Mean	2.22	2.14	3.16	4.38	5.73	6.00	7.31	6.94	5.65	4.08	2.86	2.62	53.09

TABLE 269

EVAPORATION AT SAN DIEGUITO RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ------------------ On Little Elijo Creek, southerly from Escondido. Lat. 33° 02′ N., Long. 117° 12′ W.
  Elevation ------------------ 250 feet.
Evaporation pan:
  Type ------------------ Ground pan.
  Description ------------------ Square, 3 x 3 feet, depth 18 inches, set 15 inches in ground, painted black.
Authority for data ------------------ San Diego Water Department, Division of Water Development and Conservation.
Publication reference ------------------ None.
Meteorologic data ------------------ None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1933	1.83	2.58	4.22	4.79	5.12	7.18	8.12	7.59	5.12	3.85	-------	-------	-------
1934	-------	2.78	3.51	5.15	7.77	5.40	8.05	7.78	6.36	3.50	2.45	1.67	-------
1935	1.42	-------	2.73	4.21	5.98	6.96	7.10	6.52	5.55	4.31	1.75	1.70	-------
1936	1.96	1.33	3.26	3.51	5.89	7.12	8.35	7.96	6.97	3.46	3.62	.81	54.24
1937	-------	-------	2.59	4.18	6.63	8.10	9.22	9.60	8.34	4.68	2.29	1.86	-------
1938	1.90	1.56	2.19	5.12	6.59	7.55	8.92	9.08	9.08	5.25	2.15	.91	60.30
1939	-------	-------	2.75	4.92	6.27	7.42	8.76	8.32	5.62	4.66	3.03	2.76	-------
1940	.98	-------	3.23	3.97	7.88	8.66	8.97	8.48	5.08	4.24	3.14	3.97	-------
1941	-------	2.18	-------	-------	4.02	7.14	7.75	7.80	6.70	3.71	2.11	1.45	-------
1942	.96	.97	-------	-------	6.43	7.76	8.06	8.32	6.48	4.48	2.26	-------	-------
1943	-------	.97	1.77	2.24	4.38	6.15	7.02	7.80	6.53	4.21	3.78	2.34	-------
1944	-------	-------	-------	4.38	5.42	5.91	7.34	7.86	7.54	7.71	2.16	1.86	-------
1945	1.16	-------	1.50	2.90	4.97	6.46	7.74	6.11	6.27	4.59	3.27	2.38	-------
Mean	1.46	1.77	2.78	4.12	5.95	7.06	8.11	7.94	6.59	4.51	2.67	1.97	54.93

TABLE 270

EVAPORATION AT SAN DIMAS CANYON, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ------------------ Below San Dimas Dam about two miles northeast of San Dimas. Lat. 34° 09′ N., Long. 117° 46′ W.[1]
  Elevation ------------------ 1,480 feet.
Evaporation pan:
  Type ------------------ U. S. Weather Bureau pan.
  Description ------------------ Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data ------------------ California Forest and Range Experiment Station, San Dimas Experimental Forest.
Publication reference ------------------ None.
Meteorologic data ------------------ Temperature, wind.

Year	Evaporation in inches[2]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1936	-------	-------	-------	-------	6.87	8.73	9.69	8.68	7.65	5.77	3.51	2.51	-------
1937	2.04	2.04	3.00	2.50	4.81	6.82	9.07	9.84	7.88	5.96	3.13	2.20	58.29
1938	3.69	2.09	3.09	3.46	6.66	7.46	8.08	8.62	7.21	4.30	4.20	2.71	61.57
1939	2.03	2.21	2.04	4.24	5.43	7.68	9.03	8.51	5.41	4.28	3.71	3.06	57.63
1940	1.00	1.53	3.83	3.22	6.46	6.92	9.48	8.73	6.71	5.62	3.25	1.82	58.57
1941	1.62	1.00	2.00	2.08	6.63	5.96	8.81	6.90	5.75	3.93	3.66	1.74	50.08
1942	2.27	2.63	3.86	2.98	5.95	6.83	9.82	8.60	6.27	4.55	2.69	2.47	58.92
1943	2.79	2.27	2.40	3.36	6.29	6.89	8.17	7.97	7.31	-------	-------	-------	-------
Mean	2.20	1.97	2.89	3.12	6.14	7.16	9.02	8.48	6.77	4.92	3.31	2.36	58.34

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[1] This station was located on an east and west fire break, 100 feet wide, cut through the chaparral.

[2] The values for December 1936 through March 1937 and for February 1938 through June 1938 are interpolated from the 5-year mean, 1938-43, for corresponding months on the basis of comparison with late data taken simultaneously at both places.

TABLE 271

EVAPORATION AT SAN DIMAS CANYON, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	Below San Dimas Dam about two miles northeast of San Dimas. Lat. 34° 09′ N., Long. 117° 46′ W.*
Elevation	1,480 feet.
Evaporation pan:	
Type	Ground pan.
Description	Diameter 35.68 inches, depth 18 inches, set in ground 15 inches.
Authority for data	California Forest and Range Experiment Station, San Dimas Experimental Forest.
Publication reference	None.
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec .	Annual
1936	-------	-------	-------	-------	-------	7.58	8.31	7.92	5.27	4.62	2.79	[1]2.30	-------
1937	[1]1.30	[1]1.60	[1]2.40	2.17	4.32	5.46	8.53	7.31	7.24	4.91	2.85	1.91	50.00
1938	2.59	[1]1.69	[1]2.54	[1]3.18	4.00	6.14	8.22	7.85	7.06	4.64	3.76	2.33	54.00
1939	1.83	1.98	1.88	3.44	5.19	7.50	8.31	7.94	5.19	3.84	3.04	2.53	52.67
1940	.90	1.36	3.12	2.87	5.61	5.88	8.30	7.43	5.97	-------	-------	-------	-------
Mean	1.66	1.66	2.48	2.92	4.78	6.51	8.33	7.69	6.15	4.50	3.11	2.27	52.06

* This station was located on an east and west fire break, 100 feet wide, cut through the chaparral.

[1] Partly estimated.

TABLE 272

TEMPERATURE AT SAN DIMAS CANYON, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1937	40	50	53	58	61	67	73	75	73	67	58	56	61
1938	54	52	52	57	62	64	72	74	74	63	57	56	61
1939	51	47	52	60	61	68	73	75	74	66	61	59	62
1940	53	53	56	59	64	67	72	71	68	66	56	56	62
1941	51	52	53	53	65	63	73	70	66	63	61	50	60
1942	52	49	54	54	60	65	75	72	67	-------	-------	-------	-------
Mean	50	50	53	57	62	66	73	73	70	65	59	55	61

TABLE 273

WIND MOVEMENT AT SAN DIMAS CANYON, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1936	-------	-------	-------	-------	1,095	1,508	1,139	1,011	1,027	1,386	1,618	987	-------
1937	-------	1,110	801	-------	-------	919	863	768	1,204	1,203	1,081	1,472	-------
1938	1,507	916	972	1,187	1,050	852	1,158	1,112	1,269	1,084	1,209	-------	-------
1939	-------	-------	-------	-------	-------	-------	-------	-------	1,110	1,266	1,276	1,212	-------
1940	1,130	1,273	1,158	1,061	1,191	1,137	1,318	1,324	1,225	1,347	1,412	-------	-------
1941	946	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Mean	1,194	1,100	977	1,124	1,112	1,104	1,120	1,054	1,167	1,257	1,319	1,223	13,751

[1] Anemometer about 7 feet above ground surface.

TABLE 274

EVAPORATION AT SAN GABRIEL DIVIDE, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	On northern crest of San Dimas Experimental Forest. Lat. 34° 13′ N., Long. 117° 43′ W.
Elevation	4,350 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	California Forest and Range Experiment Station, San Dimas Experimental Forest.
Publication reference	None.
Meteorologic data	Temperature, wind.

Year	Evaporation in inches[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1936	------	------	------	------	------	9.21	9.85	9.46	8.50	5.65	3.31	2.53	------
1937	2.02	1.70	3.74	3.95	6.36	8.68	10.61	10.34	8.20	6.81	3.60	1.86	67.87
1938	1.99	.94	2.97	4.56	9.06	7.77	10.35	8.71	8.01	5.07	4.88	3.03	67.34
1939	2.29	2.58	3.87	6.06	6.61	9.15	10.74	11.30	7.06	6.75	4.53	2.93	73.87
1940	1.93	2.05	4.72	5.08	7.69	9.78	10.51	10.61	7.49	5.86	3.67	2.00	71.39
1941	1.15	1.00	2.11	3.20	6.35	6.18	9.76	8.05	7.24	5.08	3.49	1.55	55.16
1942	2.68	2.56	4.33	2.58	6.49	8.57	11.74	10.50	9.00	6.52	4.19	3.99	73.15
1943	3.50	3.03	2.73	4.38	7.40	7.31	9.84	8.87	7.74	------	------	------	------
Mean	1.22	1.98	3.50	4.26	7.14	8.33	10.42	9.73	7.90	5.96	3.95	2.56	66.95

[1] The values for October 1936 through July 1937 and for December 1937 through April 1938 are interpolated from data obtained from a Weather Bureau pan at Tanbark Flat on the basis of comparison with later data taken simultaneously at both places.

TABLE 275

TEMPERATURE AT SAN GABRIEL DIVIDE, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA[1]

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1933	------	------	------	------	------	------	------	------	------	65	60	53	------
1934	54	51	63	62	65	62	77	76	70	63	55	50	64
1935	46	48	44	51	54	71	74	77	75	61	53	51	59
1936	51	46	54	57	64	72	78	80	74	64	61	51	63
1937	38	49	50	54	60	67	76	78	72	64	54	50	59
1938	48	39	44	51	57	64	74	72	72	59	52	50	57
1939	44	38	47	58	58	68	73	77	66	61	59	55	59
1940	49	47	54	54	64	72	74	77	66	63	55	49	60
1941	43	45	46	47	61	64	76	71	66	56	58	46	57
1942	50	44	49	48	57	68	80	76	71	------	------	------	------
Mean	47	45	50	54	60	68	76	76	70	62	56	51	60

[1] No temperature records were obtained at the station during the period Jan. 1934 to Sept. 1937 inclusive. Above data for this period were obtained by comparison on the basis of data taken at an earlier location at Tanbark Flat.

TABLE 276

WIND MOVEMENT AT SAN GABRIEL DIVIDE, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1936	1,990	2,190	1,517	1,911	2,102	1,774	1,935	-------	2,136	2,417	2,873	2,012	-------
1937	1,681	1,595	1,210	1,950	1,491	1,520	1,596	1,484	1,665	1,866	1,496	2,696	20,250
1938	2,979	2,645	2,201	1,830	1,869	1,508	1,633	1,726	1,734	1,910	2,196	2,750	24,981
1939	2,467	2,060	2,190	2,220	1,699	1,626	1,683	1,716	2,280	3,228	2,314	1,834	25,317
1940	2,010	2,013	2,041	1,808	1,753	1,425	1,751	1,697	1,911	1,973	2,138	2,070	22,590
1941	2,217	2,581	2,541	2,016	1,810	1,439	1,526	1,636	1,841	2,181	2,412	1,930	24,130
1942	1,983	2,132	2,112	1,887	1,704	1,576	1,820	1,698	1,953	-------	-------	-------	-------
Mean	2,190	2,174	1,973	1,946	1,775	1,552	1,706	1,660	1,931	2,262	2,238	2,215	23,622

[1] Anemometer 7 feet above ground surface.

TABLE 277

EVAPORATION AT SAN GABRIEL DAM NO. 1, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ------------------San Gabriel Canyon. Lat. 34° 12′ N., Long. 117° 51′ W.
Elevation ----------------Max. 1,470 feet.
Evaporation pan:
Type ---------------------Floating pan in reservoir.
Description ---------------Square, 30 x 30 inches, 18 inches deep.
Authority for data------------Los Angeles County Flood Control District.
Publication reference ----------Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1940	1.58	2.00	3.42	4.17	6.93	7.58	9.66	8.45	6.06	5.32	3.65	2.08	60.90
1941	1.92	1.52	2.48	3.42	6.94	7.00	8.70	7.95	5.96	-------	4.26	1.88	-------
1942	2.30	2.98	4.57	3.32	6.46	6.56	9.22	8.04	6.09	4.74	3.50	2.68	60.46
1943	-------	-------	-------	-------	6.30	7.18	7.66	8.42	7.50	5.34	4.47	1.89	-------
1944	2.04	1.46	2.81	4.32	4.92	5.85	7.36	9.18	7.26	5.42	2.70	2.82	55.84
1945	2.72	1.80	1.92	4.18	5.28	4.73	6.96	8.15	7.86	4.50	4.13	2.38	54.61
Mean	2.11	1.95	3.04	3.88	6.14	6.48	8.26	8.37	6.79	5.06	3.78	2.29	58.15

TABLE 278

EVAPORATION AT SAN GABRIEL DAM NO. 1, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	In San Gabriel Canyon. Lat. 34° 12′ N., Long. 117° 51′ W.
Elevation	1,481 feet.[1]
Evaporation pan:	
Type	Ground pan.
Description	Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data	Los Angeles County Flood Control District.
Publication reference	Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	-------	-------	-------	-------	-------	-------	-------	-------	-------	6.70	5.21	4.08	-------
1940	1.97	2.34	3.74	3.64	6.09	6.19	9.88	8.91	7.34	8.39	5.34	3.38	67.20
1941	2.54	2.06	3.60	4.44	7.53	7.64	10.87	9.03	7.98	6.56	5.34	2.50	70.09
1942	2.80	3.42	5.03	3.81	7.24	7.31	10.81	9.80	8.68	6.10	4.60	3.58	73.18
1943	3.45	3.34	2.98	4.52	7.74	8.94	10.48	10.56	10.58	7.36	6.47	2.80	79.22
1944	2.82	2.36	5.08	5.54	6.74	6.98	9.86	11.74	9.16	7.20	3.64	3.90	75.02
1945	3.46	2.70	3.30	5.94	6.90	6.30	9.66	9.80	8.78	5.60	4.68	2.96	70.08
Mean	2.84	2.70	3.96	4.65	7.04	7.23	10.26	9.97	8.75	6.84	5.04	3.31	72.59

[1] Prior to Dec. 1938 records were obtained at Edison Canal Intake at elevation 1,275 feet. There was little change in location at the two stations other than elevation.

TABLE 279

EVAPORATION AT SAN GABRIEL DAM NO. 2, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	West Fork of San Gabriel Canyon. Lat. 34° 15′ N., Long. 117° 58′ W.
Elevation	Approx. 2,300 feet.
Evaporation pan:	
Type	Floating pan.*
Description	Square, 30 x 30 inches, 18 inches deep.
Authority for data	Los Angeles County Flood Control District.
Publication reference	Annual Reports Los Angeles County Flood Control District (28).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1937	-------	-------	-------	-------	4.37	6.69	8.60	8.28	-------	-------	-------	-------	-------
1938	-------	-------	-------	4.30	5.15	6.02	8.07	-------	-------	-------	-------	-------	-------
1939						No	record						
1940	-------	1.97	3.90	4.24	7.36	8.50	10.36	-------	-------	-------	-------	[1]1.78	-------
1941	1.51	1.20	2.90	3.28	5.88	6.40	8.84	8.10	7.84	3.91	-------	1.11	-------
1942	1.50	2.07	3.40	3.32	6.14	7.62	10.41	9.42	-------	-------	-------	-------	-------
1943	1.60	2.07	2.58	3.94	6.42	7.16	9.09	9.26	-------	-------	-------	-------	-------
1944	1.73	1.60	3.97	4.80	6.06	5.91	8.47	8.94	6.47	-------	-------	1.98	-------
1945	1.90	1.99	2.23	5.04	6.28	6.22	9.00	8.96	7.19	4.48	3.28	1.70	58.27
Mean	1.65	1.82	3.16	4.13	5.96	6.82	9.10	8.83	7.17	4.20	3.28	1.64	57.76

* Pan is protected in the reservoir by a 6 inch wave baffle to prevent splash. Water levels in pan and reservoir about equal.

[1] Partly estimated.

TABLE 280

EVAPORATION AT SAN GABRIEL DAM NO. 2, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ------------------West Fork of San Gabriel Canyon. Lat. 34° 15′ N., Long. 117° 58′ W.*
  Elevation ------------------2,335 feet.
Evaporation pan:
  Type ----------------------Ground pan.
  Description ---------------Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data-------------Los Angeles County Flood Control District.
Publication reference ---------Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935---	1.66	3.32	3.45	4.42	5.56	7.90	9.89	10.02	9.00	7.18	4.13	3.05	69.58
1936---	2.92	1.42	4.32	4.60	6.16	9.82	11.70	11.51	10.00	5.79	4.68	1.88	74.80
1937---	1.07	1.81	2.68	6.06	6.28	8.39	11.40	10.64	10.40	7.92	4.95	3.64	75.24
1938---	3.17	4.92	3.08	5.46	6.88	8.99	11.86	11.74	10.66	6.75	5.94	3.78	83.23
1939---	3.04	3.24	3.94	6.40	8.06	10.74	13.10	12.80	8.85	7.07	4.88	3.05	85.17
1940---	1.92	2.48	4.58	4.92	7.98	10.28	12.07	12.05	9.36	7.39	4.16	2.23	79.42
1941---	1.59	1.42	3.20	3.91	6.96	8.01	11.56	9.96	8.86	5.11	2.78	1.56	64.92
1942---	2.15	2.88	3.98	3.56	7.08	8.98	12.42	10.88	9.22	6.36	3.56	2.50	73.57
1943---	2.65	2.08	2.63	4.22	7.50	7.88	10.75	10.62	9.32	6.16	4.04	1.54	69.39
1944---	[1]1.57	1.46	4.08	4.45	6.24	6.44	9.95	10.40	7.90	5.78	2.23	1.93	62.43
1945---	1.86	2.08	2.27	5.27	6.62	7.02	10.66	9.65	7.88	4.74	2.90	1.66	62.61
Mean--	2.15	2.46	3.47	4.84	6.85	8.59	11.40	10.93	9.22	6.39	4.02	2.44	72.76

* Evaporation station located in open exposure on a shoulder of the mountain above the valley floor.
[1] Partly estimated.

TABLE 281

EVAPORATION AT SAN JACINTO, RIVERSIDE COUNTY, CALIFORNIA

Station:
  Location ------------------At City Water Works in San Jacinto. Lat. 33° 47′ N., Long. 116° 57′ W.*
  Elevation ------------------1,550 feet.
Evaporation pan:
  Type ----------------------U. S. Weather Bureau pan.
  Description ---------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data-------------Div. of Irrig., SCS, U. S. Dept. of Agric.
Publication reference ---------None.
Meteorologic data ------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939---	------	------	------	------	------	------	11.30	10.70	5.82	5.80	3.46	2.35	------
1940---	1.59	2.56	4.46	5.51	9.96	10.12	12.47	11.27	8.39	6.31	3.54	2.29	78.47
1941---	1.78	2.36	4.07	4.66	8.33	9.44	12.01	8.31	7.20	4.30	3.22	[1]1.54	67.22
1942---	2.33	2.72	5.10	5.02	8.52	10.43	13.25	11.07	8.49	5.69	3.82	2.65	79.09
1943---	2.60	3.26	3.84	5.57	9.35	10.29	11.53	10.02	9.24	5.72	3.61	1.70	76.73
1944---	2.18	2.61	5.12	6.02	6.86	7.65	8.68	10.23	7.81	5.53	2.37	1.90	67.96
1945---	1.83	2.39	3.41	5.19	7.87	8.84	10.57	8.64	6.99	4.80	3.66	1.92	66.11
1946---	3.22	3.09	4.23	5.65	6.62	------	------	------	------	------	------	------	------
Mean--	2.22	2.71	4.32	5.39	8.22	9.46	11.54	10.03	7.70	5.45	3.38	2.05	72.47

* Buildings and trees within 100 feet of the station.
[1] Adjusted.

TABLE 282

EVAPORATION AT SAN JACINTO, RIVERSIDE COUNTY, CALIFORNIA

Station:
  Location ____________________At City Water Works in San Jacinto. Lat. 33° 47′ N., Long. 116° 57′ W.*
  Elevation ____________________1,550 feet.
Evaporation pan:
  Type ________________________Screened ground pan.
  Description _________________Diameter 2 feet, depth 3 feet, set in ground 2.75 feet, water surface shaded by $\frac{1}{4}$ inch mesh galvanized hardware cloth.
Authority for data______________Div. of Irrig., SCS, U. S. Dept. of Agric.
Publication reference __________None.
Meteorologic data ______________Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	-------	-------	-------	-------	-------	-------	9.56	9.10	4.85	4.14	2.35	1.45	-------
1940	0.97	1.58	2.83	3.66	7.95	8.46	9.25	9.18	7.01	4.85	2.37	1.49	59.60
1941	1.11	1.14	2.29	2.92	5.93	7.37	9.04	6.52	5.92	3.28	1.74	.94	48.20
1942	1.29	1.66	3.29	3.40	6.20	8.20	10.20	8.72	6.73	4.46	2.57	[1]1.05	57.77
1943	1.12	1.99	2.17	3.66	7.38	8.53	11.00	8.83	7.45	3.86	2.49	1.23	59.71
1944	1.35	1.58	2.54	3.25	5.41	5.86	6.57	8.02	6.48	4.31	1.85	.97	48.19
1945	1.27	2.67	2.33	3.37	5.90	7.26	8.94	6.36	5.35	3.50	2.33	1.32	50.60
1946	2.07	1.86	2.84	3.52	4.62	-------	-------	-------	-------	-------	-------	-------	-------
Mean	1.31	1.78	2.61	3.40	6.20	7.61	9.22	8.10	6.26	4.06	2.24	1.21	54.00

* Buildings and trees within 100 feet of the station.
[1] Incomplete record.

TABLE 283

TEMPERATURE AT SAN JACINTO, RIVERSIDE COUNTY, CALIFORNIA

Year	Mean temperature in °F												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	-------	-------	-------	-------	-------	-------	76	78	73	66	58	58	-------
1940	53	50	56	60	68	72	75	76	70	66	56	54	63
1941	50	54	54	56	67	68	76	72	68	60	58	52	61
1942	51	48	53	57	63	70	78	78	70	63	58	52	62
1943	51	54	55	53	65	69	73	75	75	68	58	51	62
1944	50	41	53	55	63	66	75	75	71	65	55	53	60
1945	49	52	50	56	62	70	77	78	76	66	58	48	62
1946	51	51	56	60	64	-------	-------	-------	-------	-------	-------	-------	-------
Mean	51	50	54	57	64	69	76	76	72	65	57	52	62

TABLE 284

WIND MOVEMENT AT SAN JACINTO, RIVERSIDE COUNTY, CALIFORNIA[1]

Year	Total wind in miles[2]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1939	-------	-------	-------	-------	-------	-------	1,222	952	752	886	673	569	-------
1940	764	814	1,051	891	1,210	894	839	910	823	675	660	700	10,231
1941	845	743	884	853	987	1,023	918	830	822	683	504	670	9,762
1942	794	823	1,118	1,066	1,093	1,172	1,174	1,104	921	935	772	-------	-------
1934	-------	1,057	951	943	1,250	1,273	972	1,083	848	696	605	867	-------
1944	715	964	1,329	1,005	924	878	865	747	740	767	725	512	10,171
1945	643	721	945	869	875	1,098	982	758	739	799	697	535	9,661
1946	964	773	1,199	847	956	-------	-------	-------	-------	-------	-------	-------	-------
Mean	788	842	1,068	925	1,041	1,056	996	912	806	777	662	642	10,515

[1] Buildings and trees in the vicinity offer some obstruction to free wind movement over the evaporation station.
[2] Anemometer cups about 6 inches above top of Weather Bureau pan.

TABLE 285

EVAPORATION AT SAN PABLO RESERVOIR, CONTRA COSTA COUNTY, CALIFORNIA

Station:
  Location ________________ North of Berkeley on San Pablo Creek. Lat. 37° 57′ N., Long. 122° 16′ W.
  Elevation ________________ 330 feet.
Evaporation pan:
  Type ____________________ Ground pan.
  Description ______________ Square, 3 x 3 feet, depth 18 inches, set in ground 15 inches.
Authority for data ____________ East Bay Municipal Utility District.
Publication reference _________ Trans. Am. Soc. C. E., Vol. 99 (17).
Meteorologic data ____________ Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	2.07	3.32	4.64	6.09	7.62	7.88	7.75	5.00	4.64	2.89	1.64	-------
1931	1.05	1.49	3.43	4.95	6.90	7.43	9.80	8.06	6.28	3.91	2.27	.93	56.50
1932	1.39	1.72	3.43	4.65	5.99	7.68	8.46	8.02	6.50	5.28	3.34	1.72	58.18
1933	1.41	2.36	3.06	5.26	5.84	7.39	8.82	7.49	5.90	4.95	3.52	1.05	57.05
1934	1.45	1.36	3.44	5.48	6.94	7.49	8.96	8.02	7.03	4.27	1.54	1.54	57.52
1935	1.19	1.90	2.94	3.31	6.48	8.77	9.09	7.84	5.50	4.61	2.25	1.39	55.27
1936	1.47	.88	3.98	4.48	7.07	7.22	9.15	7.88	7.13	4.87	2.99	1.63	58.75
1937	1.06	1.35	2.23	4.37	6.80	6.80	8.06	8.15	6.19	3.82	1.78	1.38	51.99
1938	1.18	1.10	2.04	3.68	6.07	7.93	7.53	8.87	6.62	3.78	3.53	1.71	54.04
1939	1.33	2.11	2.56	5.58	6.65	8.20	8.06	6.99	6.40	4.64	2.91	1.10	56.53
1940	.86	1.31	3.14	4.18	6.18	7.31	8.02	7.31	5.12	3.97	2.07	1.67	51.14
1941	.90	.71	3.06	3.55	5.27	6.99	7.94	6.66	6.20	3.97	1.64	.87	47.76
1942	1.00	1.69	3.63	3.23	5.19	7.44	8.15	6.91	5.03	3.80	1.66	.86	48.59
1943	1.26	1.59	1.81	4.10	7.08	6.77	7.57	7.26	5.57	3.81	2.21	1.61	50.64
1944	1.05	1.45	3.86	3.71	5.71	6.05	7.56	7.40	6.10	3.62	-------	-------	-------
Mean	1.19	1.54	3.06	4.34	6.28	7.41	8.34	7.64	6.04	4.26	2.47	1.36	53.83

TABLE 286

EVAPORATION AT SAN PABLO RESERVOIR, CONTRA COSTA COUNTY, CALIFORNIA

Station:
  Location ________________ North of Berkeley on San Pablo Creek. Lat. 37° 57′ N., Long. 122° 16′ W.
  Elevation ________________ 330 feet.
Evaporation pan:
  Type ____________________ Ground pan.
  Description ______________ Diameter 6 feet, depth 24 inches, set in ground 21 inches.
Authority for data ____________ East Bay Municipal Utility District.
Publication reference _________ Trans. Am. Soc. C. E., Vol. 99 (17).
Meteorologic data ____________ Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	1.73	3.08	4.30	5.65	7.14	7.36	7.08	4.58	4.15	2.52	1.37	-------
1931	0.90	1.27	3.14	4.41	6.34	6.89	9.19	7.36	5.66	3.44	2.09	.73	51.42
1932	1.15	1.46	2.92	4.01	5.24	6.90	7.77	7.19	5.91	4.58	2.68	1.37	51.18
1933	1.20	1.98	2.84	4.85	5.42	7.00	8.42	6.92	5.24	4.24	2.90	.89	51.90
1934	1.18	1.22	3.18	5.19	6.49	7.00	8.34	7.41	6.25	3.72	1.27	1.20	52.45
1935	.98	1.65	2.66	3.18	5.98	8.22	8.30	7.15	4.81	3.90	1.75	1.11	49.69
1936	1.23	.85	3.45	3.98	6.53	6.83	8.44	7.09	6.14	4.06	2.44	1.37	52.41
1937	.86	1.23	2.09	4.00	6.24	6.52	7.52	7.42	5.42	3.29	1.50	1.06	47.15
1938	.94	.91	1.76	3.32	5.67	7.73	7.26	7.77	5.52	3.14	2.77	1.30	48.09
1939	1.03	1.81	2.34	4.83	6.16	7.69	7.68	6.41	5.60	3.89	2.21	.93	50.58
1940	.80	1.09	2.90	3.71	5.97	6.96	7.68	6.78	4.67	3.38	1.77	1.42	47.13
1941	.76	.67	2.88	3.43	5.10	6.81	7.55	6.22	5.48	3.53	1.53	.88	44.84
1942	.96	1.59	3.26	3.22	5.28	7.36	7.84	6.50	4.65	3.42	1.48	.93	46.49
1943	1.10	1.46	1.93	3.96	6.86	6.91	7.52	7.13	5.22	3.47	1.91	1.43	48.90
1944	.92	1.51	3.69	3.64	5.83	6.23	7.41	6.91	5.57	3.41	-------	-------	-------
Mean	1.00	1.36	2.81	4.00	5.92	7.08	7.88	7.02	5.38	3.71	2.06	1.14	49.36

TABLE 287

EVAPORATION AT SAN PABLO RESERVOIR, CONTRA COSTA COUNTY, CALIFORNIA

Station:
  Location ------------------North of Berkeley on San Pablo Creek. Lat. 37° 57′ N., Long. 122° 16′ W.
  Elevation ------------------Maximum 315 feet, minimum 220 feet, varies with reservoir level.
Evaporation pan:
  Type ------------------------Floating pan.
  Description ----------------Square, 3 x 3 feet, depth 18 inches.
Authority for data-------------East Bay Municipal Utility District.
Publication reference ----------Trans. Am. Soc. C. E., Vol. 99 (17).
Meteorologic data -------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930---	-------	1.14	2.22	3.41	4.36	5.21	5.48	5.04	3.68	3.37	2.49	1.92	-------
1931---	0.96	1.10	2.42	3.56	4.83	5.29	7.30	5.70	4.50	3.23	2.60	1.07	42.56
1932---	1.23	1.33	2.07	3.26	3.81	5.14	5.70	5.30	4.41	3.67	2.29	2.32	40.53
1933---	1.35	1.49	1.70	3.48	3.61	4.72	5.57	5.48	3.97	3.40	2.83	1.41	39.01
1934---	1.32	.92	2.19	3.60	4.84	5.18	5.84	5.88	4.97	3.44	1.75	1.89	41.82
1935---	1.01	1.22	1.96	2.20	4.52	5.53	6.42	5.72	4.08	3.48	2.28	1.59	40.01
1936---	1.05	.75	2.38	2.66	4.62	4.78	6.33	5.34	4.68	3.59	2.41	1.54	40.13
1937---	1.52	.83	1.29	3.07	4.84	4.85	6.15	5.88	4.55	2.95	1.70	1.64	39.27
1938---	1.14	.64	1.34	2.63	4.25	5.57	4.95	5.93	4.53	2.92	3.10	1.36	38.36
1939---	1.17	1.56	1.46	3.66	4.79	6.47	6.02	5.39	4.64	3.64	2.37	1.14	42.31
1940---	.86	.92	2.02	2.94	4.24	5.21	5.84	5.57	3.61	3.01	2.22	1.27	37.71
1941---	.58	.46	1.99	2.31	3.80	5.26	5.82	4.83	4.65	3.25	1.71	1.01	35.67
1942---	1.29	1.36	2.30	1.99	3.68	5.35	6.19	5.12	3.65	2.99	1.64	1.19	36.75
1943---	1.30	.95	1.28	2.76	5.17	4.94	5.44	5.26	3.74	2.92	1.87	1.12	36.75
1944---	.84	.88	2.50	2.44	4.24	4.61	4.70	4.59	3.79	2.49	-------	-------	-------
Mean--	1.12	1.04	1.94	2.93	4.37	5.21	5.85	5.40	4.23	3.22	2.23	1.46	39.00

TABLE 288

EVAPORATION AT SAN PABLO RESERVOIR, CONTRA COSTA COUNTY, CALIFORNIA

Station:
  Location ------------------North of Berkeley on San Pablo Creek. Lat. 37° 57′ N., Long. 122° 16′ W.
  Elevation ------------------Maximum 315 feet, minimum 220 feet, varies with reservoir level.
Evaporation pan:
  Type ------------------------Floating pan No. 1.
  Description ----------------Square, 3 x 3 feet, depth 18 inches.
Authority for data-------------East Bay Municipal Utility District.
Publication reference ----------Trans. Am. Soc. C. E., Vol. 99 (17).
Meteorologic data -------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1921---	-------	-------	-------	-------	-------	-------	-------	-------	-------	5.43	3.36	2.42	-------
1922---	-------	-------	-------	5.68	5.05	5.54	6.08	8.10	5.89	2.17	2.40	.50	-------
1923---	0.63	1.71	3.30	3.87	6.03	5.43	7.48	6.46	6.25	4.61	2.78	1.77	50.32
1924---	1.56	1.59	[1]3.28	[2]4.40	6.13	[1]7.29	[1]6.86	[1]6.67	6.69	[2]3.23	2.12	[2] .89	50.71
1925---	.87	[2] .73	3.18	3.59	4.81	[1]6.62	[2]6.62	6.38	5.25	[2]4.40	2.62	1.70	46.77
1926---	[2]1.18	[2]1.46	[2]3.52	3.61	6.22	[2]7.24	7.69	[2]6.99	[2]5.51	[2]3.44	[2]1.37	[2]2.15	50.38
1927---	[2] .69	.20	2.29	[2]2.80	6.14	[1]5.75	7.33	6.14	6.12	4.40	1.48	[2]1.40	44.74
1928---	[2] .95	[2]1.66	[2]1.44	[2]3.65	5.05	7.22	[2]5.34	[2]5.44	5.01	3.81	[1]2.48	[1]1.60	43.65
1929---	.85	[2]1.92	1.93	3.42	5.62	[2]5.90	[2]7.12	[2]5.94	-------	[3]	-------	-------	-------
Mean--	0.96	1.32	2.70	3.88	5.63	6.37	6.82	6.52	5.82	3.94	2.33	1.55	47.84

---

[1] Record doubtful due to wind action on one or more days.

[2] One or more days estimated.

[3] In October 1929 it was found that water surface in the pan was ¾ to 1 inch above water surface in the reservoir. This condition presumably prevailed during the entire period of record, causing an above normal rate of evaporation.

TABLE 289

EVAPORATION AT SAN PABLO RESERVOIR, CONTRA COSTA COUNTY, CALIFORNIA

Station:
Location ------------------North of Berkeley on San Pablo Creek. Lat. 37° 57′ N., Long. 122° 16′ W.
Elevation ------------------300 feet.
Evaporation pan:
Type ----------------------Ground pan No. 2.
Description ---------------Square, 3 x 3 feet, depth 18 inches, set in ground 15 inches.
Authority for data-------------East Bay Municipal Utility District.
Publication reference ---------Trans. Am. Soc. C. E., Vol. 99 (17).
Meteorologic data -------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1921	------	------	------	------	------	------	------	------	------	5.54	2.64	1.37	------
1922	------	------	------	5.62	5.12	6.45	6.79	8.42	6.00	1.68	2.11	.46	------
1923	0.27	1.64	3.22	2.76	5.72	5.11	6.86	6.41	5.38	3.11	2.05	1.07	43.60
1924	1.08	1.61	2.66	4.01	5.18	7.10	7.33	[1]7.10	6.51	3.39	1.64	.78	48.39
1925	.84	.83	2.19	2.36	3.88	6.51	[2]6.45	6.04	4.81	4.24	1.81	1.22	41.18
1926	1.07	1.30	[2]3.11	3.24	5.98	[2]6.78	7.81	[2]7.18	7.07	3.36	2.13	[2]1.24	50.27
1927	[2].90	1.10	1.97	3.19	4.75	5.16	7.07	5.91	4.55	3.54	.97	.81	39.92
1928	.62	1.33	1.36	2.73	4.85	6.73	5.26	5.48	4.74	3.47	1.98	.51	39.06
1929	.64	[2]1.61	1.88	2.67	5.30	5.10	6.69	5.91	------	------	------	------	------
Mean	0.77	1.34	2.34	3.32	5.10	6.12	6.78	6.56	5.58	3.54	1.92	0.93	44.30

[1] Record doubtful due to wind action on one or more days.
[2] One or more days estimated.

TABLE 290

EVAPORATION AT SAN PABLO RESERVOIR, CONTRA COSTA COUNTY, CALIFORNIA

Station:
Location ------------------North of Berkeley on San Pablo Creek near outlet tower of reservoir. Lat. 37° 56′ N., Long. 122° 15′ W.
Elevation ------------------Approx. 300 feet.
Evaporation pan:
Type ----------------------Ground pan No. 4.
Description ---------------Square, 3 x 3 feet, depth 18 inches, set in ground 15 inches.
Authority for data-------------East Bay Municipal Utility District.
Publication reference ---------Trans. Am. Soc. C. E., Vol. 99 (17).
Meteorologic data -------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1922	------	------	------	4.04	5.25	6.05	5.97	6.40	5.42	6.14	3.13	1.53	------
1923	0.53	1.69	3.46	4.01	6.40	5.87	8.04	6.40	7.47	1.96	2.09	.46	48.38
1924	.92	1.31	2.53	3.68	6.52	8.33	8.16	6.72	5.66	5.68	3.15	1.03	53.69
1925	[1].51	[1].38	[2]2.10	2.41	3.90	7.14	[2]6.67	6.48	4.91	[2]3.68	1.21	.54	39.93
1926	.72	.92	2.60	3.42	5.35	[2]8.10	9.16	[2]6.32	5.35	4.13	1.71	.97	48.75
1927	[2].48	.52	1.95	3.37	4.10	[2]3.63	7.58	6.34	4.91	2.68	[2]1.77	[2]1.26	38.59
1928	.44	1.18	1.09	2.85	4.85	7.41	5.79	5.75	4.34	3.49	[2]1.02	[2].62	38.83
1929	.83	1.80	2.20	3.18	[2]6.06	6.45	8.23	7.11	------	2.80	1.93	.78	------
Mean	0.63	1.11	2.28	3.37	5.30	6.62	7.45	6.44	5.44	3.82	2.00	0.90	45.36

[1] Record doubtful due to wind action on one or more days.
[2] One or more days estimated.

TABLE 291

EVAPORATION AT SAN PABLO RESERVOIR, CONTRA COSTA COUNTY, CALIFORNIA

Station:	
Location	North of Berkeley on San Pablo Creek. Lat. 37° 56′ N., Long. 122° 15′ W.
Elevation	Maximum 280 feet, minimum 220 feet, varies with reservoir level.
Evaporation pan:	
Type	Floating pan No. 3.
Description	Square, 3 x 3 feet, depth 18 inches.
Authority for data	East Bay Municipal Utility District.
Publication reference	Trans. Am. Soc. C. E., Vol. 99 (17).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1922	-------	-------	-------	3.71	5.24	6.52	6.08	6.56	5.61	2.79	2.76	0.46	-------
1923	0.99	1.26	3.10	4.05	7.21	5.91	8.19	7.42	7.42	5.99	3.16	1.59	56.29
1924	.70	1.68	[1]3.46	[2]4.13	[2]6.69	[1]7.93	[1]7.82	6.69	7.46	4.01	2.10	.74	53.41
1925	[2].96	-------	-------	-------	-------	-------	-------	-------	-------	4.56	2.30	1.51	-------
1926	1.05	.98	[2]2.59	3.96	5.56	-------	-------	-------	[2]5.89	[1]3.49	[1]2.43	[2]2.26	-------
1927	[2].52	-------	[2]2.26	[2]3.77	[2]5.84	[2]5.70	7.49	5.84	[2]5.22	[1]4.47	1.67	[2]1.31	-------
1928	[2].89	1.48	[1]1.08	[2]3.59	4.36	7.13	[1]5.47	5.53	4.94	2.61	[1]2.22	[1]1.70	41.00
1929	.78	1.93	2.30	3.51	5.80	6.35	[2]7.23	6.09	-------	[3]	-------	-------	-------
Mean	0.84	1.47	2.46	3.82	5.81	6.59	7.05	6.36	6.09	3.99	2.38	1.37	48.23

[1] Record doubtful due to wind action on one or more days.

[2] One or more days estimated.

[3] In October 1929 it was found that the water surface in the pan was ¾ to 1 inch above water surface in the reservoir. This condition presumably prevailed during the entire period of record, causing an above normal rate of evaporation.

TABLE 292

TEMPERATURE AT SAN PABLO RESERVOIR, CONTRA COSTA COUNTY, CALIFORNIA

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	48	52	54	56	55	61	62	64	62	59	54	46	56
1931	48	52	52	54	62	62	67	64	62	58	51	46	56
1932	45	47	54	53	58	61	63	64	66	60	58	43	56
1933	43	46	52	54	54	60	64	64	62	63	56	47	55
1934	48	51	58	58	61	61	64	64	65	60	55	49	58
1935	46	50	49	55	57	64	64	64	62	59	51	49	56
1936	50	49	55	56	61	64	66	65	67	63	55	47	58
1937	39	46	52	53	59	63	64	66	64	62	55	50	56
1938	47	49	50	54	58	61	63	65	65	60	53	50	56
1939	47	47	50	58	59	62	64	64	68	61	55	50	57
1940	48	52	54	56	59	62	65	63	64	62	53	52	58
1941	50	51	55	54	60	62	65	64	64	60	55	49	57
1942	47	49	51	53	56	62	65	63	62	61	52	48	56
1943	48	51	52	54	60	59	63	64	66	58	52	47	56
1944	45	46	50	50	56	58	62	61	64	59	-------	-------	-------
Mean	47	49	53	55	58	61	64	64	64	60	54	48	56

TABLE 293

WIND MOVEMENT AT SAN PABLO RESERVOIR, CONTRA COSTA COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	1,785	2,875	2,900	2,308	2,739	2,892	3,258	3,055	2,505	2,994	3,302	3,214	33,827
1931	3,346	2,202	2,613	2,355	2,545	2,660	3,129	2,989	2,777	2,822	2,721	3,357	33,516
1932	3,265	2,530	2,577	2,450	2,623	2,785	3,015	2,937	2,566	2,832	3,120	3,640	34,340
1933	3,582	2,812	2,641	2,830	2,717	2 654	2,444	2,612	2,673	2,760	3,600	3,665	34,990
1934	3,343	2,487	2,293	2,257	2,493	2,872	3,217	3,088	2,880	2,750	2,323	3,022	33,025
1935	3,460	2,870	2,995	2,140	2,409	2,629	2,785	2,661	2,341	2,842	2,763	3,122	33,017
1936	3,072	2,509	2,602	2 088	2,277	2,033	2,587	2,395	2,427	2,463	2,790	2,973	30,216
1937	3,102	2,774	2,381	2,288	2,272	1,931	2,247	2,173	2,048	2,131	2,440	3,160	28,947
1938	3,496	2,727	2,578	1,584	1,831	2,518	2,483	2,803	1,933	2,307	3,102	3,100	30,462
1939	2,761	2,345	2,139	1,788	2,005	2,206	2,069	1,988	1,822	2,370	2,349	2,649	26,491
1940	3,303	2,571	2,320	1,730	2,193	1,893	2,016	1,978	1,645	1,730	2,289	3,224	26,892
1941	2,466	2,340	2,428	1 742	1,639	1,851	1,963	1,876	1,578	1,458	1,489	1,971	22,791
1942	2,292	1,796	2,091	1 957	1,888	1.955	1,935	1,875	1,693	1,623	1,668	1,674	22,447
1943	2,048	1,584	1,454	1,619	1,802	1,759	1,837	1,749	1,517	1,608	1,490	1,680	20,147
1944	1,908	1,792	1,859	1,740	1,636	1,772	1,907	1,738	1,571	1,474	-------	-------	-------
Mean	2,882	2,414	2,391	2,058	2,204	2,294	2,459	2,394	2,132	2,278	2,532	2,889	28,927

[1] Anemometer cups set 24 inches above ground surface.

TABLE 294

EVAPORATION AT SAN VICENTE RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ---------- On San Vicente Creek, a tributary of San Diego River. Lat. 32° 55′ N., Long. 116° 55′ W.
  Elevation ---------- 660 feet.
Evaporation pan:
  Type ---------- Ground pan.
  Description ---------- Square, 3 x 3 feet, depth 18 inches, set in ground 15 inches.
Authority for data ---------- San Diego Water Department, Division of Water Development and Conservation.[1]
Publication reference ---------- None.
Meteorologic data ---------- None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1943	-------	-------	-------	-------	-------	-------	-------	-------	7.92	5.30	4.40	1.67	-------
1944	2.69	2.26	3.82	4.12	6.03	6.85	9.42	9.15	7.76	5.42	3.43	2.93	63.88
1945	2.53	1.69	2.20	4.27	6.02	5.92	8.35	7.35	6.91	5.33	3.53	-------	-------
Mean	2.61	1.98	3.01	4.20	6.02	6.38	8.88	8.25	7.53	5.35	3.79	2.30	60.30

[1] Computed long-term net depth of evaporation from reservoir may be found in Calif. Dept. of Pub. Wks. Bull. No. 48. (42)

TABLE 295

EVAPORATION AT SAN VICENTE RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:	
Location	On San Vicente Creek, a tributary of San Diego River. Lat. 32° 55′ N., Long. 116° 55′ W.
Elevation	660 feet.
Evaporation pan:	
Type	Floating pan.
Description	Square, 3 x 3 feet, depth 18 inches.
Authority for data	San Diego Water Department, Division of Water Development and Conservation.[1]
Publication reference	None.
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1943	------	------	------	------	------	------	------	------	8.41	6.41	------	2.21	------
1944	2.69	2.13	4.53	4.92	6.03	6.37	8.66	9.60	7.54	5.60	3.56	3.33	64.96
1945	2.84	4.54	2.69	4.80	6.68	6.05	8.18	7.61	7.05	5.64	4.33	------	------
Mean	2.76	3.34	3.61	4.86	6.36	6.21	8.42	8.60	7.67	5.88	3.94	2.77	64.42

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[1] Computed long-term net depth of evaporation from reservoir may be found in Calif. Dept. of Pub. Wks. Bull No. 48. (42)

TABLE 296

EVAPORATION AT SANTA ANA, ORANGE COUNTY, CALIFORNIA

Station:	
Location	On extension of Fifth Street, 4 miles west of Santa Ana. Lat. 33° 45′ N., Long. 117° 57′ W.
Elevation	Approx. 70 feet.
Evaporation pans:	
Type and description	(1) U. S. Weather Bureau pan, diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill. (2) Ground pan, diameter 23 inches, depth 32 inches, set in ground 29 inches.
Authority for data	Div. of Irrig., SCS, U. S. Dept. of Agric.
Publication reference	Calif. Dept. of Pub. Wks. Bulls. 33, 44, and 50, (5) (6) (45).
Meteorologic data	Temperature, wind.

Month	Evaporation from U. S. Weather Bureau pan in inches					Evaporation from ground pan in inches				
	1929	1930	1931	1932	Mean	1929	1930	1931	1932	Mean
January	------	2.28	2.89	2.38	2.52	------	1.86	2.19	1.79	1.95
February	------	2.87	2.74	2.73	2.78	------	2.44	2.47	1.60	2.17
March	------	4.48	5.78	4.98	5.08	------	3.38	5.45	3.50	4.11
April	------	6.05	6.02	5.86	5.98	------	4.97	5.21	4.42	4.87
May	8.39	6.79	6.89	------	7.36	5.57	5.99	5.75	------	5.77
June	8.23	6.95	8.05	------	7.74	7.91	6.44	6.85	------	7.07
July	8.89	8.54	8.90	------	8.78	8.20	7.82	8.10	------	8.04
August	8.90	7.39	7.46	------	7.92	8.33	6.74	7.10	------	7.39
September	5.65	5.83	6.21	------	5.90	5.76	5.59	5.94	------	5.76
October	6.06	5.50	4.70	------	5.42	5.64	5.03	4.27	------	4.98
November	5.26	4.26	3.09	------	4.20	4.88	3.82	2.73	------	3.81
December	3.44	3.31	1.99	------	2.91	3.06	3.14	1.45	------	2.55
Annual	------	64.25	64.72	------	66.59	------	57.22	57.51	------	58.47

TABLE 297

TEMPERATURE AND WIND MOVEMENT AT SANTA ANA STATION, ORANGE COUNTY, CALIFORNIA[1]

(5) (6) (45)

Month	Mean temperature in ° F.					Total wind in miles				
	1929	1930	1931	1932	Mean	1929	1930	1931	1932	Mean
January	--------	51	54	49	51	--------	1,743	1,382	1,335	1,487
February	--------	55	57	51	54	--------	1,682	1,378	1,371	1,477
March	--------	57	59	55	57	--------	2,212	1,830	1,510	1,851
April	--------	60	63	57	60	--------	1,970	1,736	1,659	1,788
May	63	59	67	--------	63	--------	2,228	1,781	--------	2,004
June	65	65	69	--------	66	--------	1,871	1,670	--------	1,770
July	71	69	75	--------	72	--------	1,671	1,656	--------	1,664
August	73	71	73	--------	72	--------	1,518	1,415	--------	1,466
September	69	66	70	--------	68	1,695	1,381	1,201	--------	1,426
October	66	64	65	--------	65	1,745	1,322	1,121	--------	1,396
November	59	60	55	--------	58	1,806	1,534	1,223	--------	1,521
December	57	53	50	--------	53	1,547	1,389	1,136	--------	1,357
Annual	--------	61	63	--------	62	--------	20,521	17,529	--------	19,207

[1] Anemometer cups about 18 inches above ground.

TABLE 298

EVAPORATION AT SANTA ANITA DAM, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ------------------ On Big Santa Anita Creek, north of Arcadia in San Gabriel Mountains. Lat. 34° 11′ N., Long. 118° 01′ W.*
Elevation ------------------ 1,400 feet.
Evaporation pan:
Type ------------------ Ground pan.
Description ------------------ Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data ------------------ Los Angeles County Flood Control District.
Publication reference ------------------ Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------------ None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annua
1931	3.56	2.45	5.95	4.82	4.56	6.10	7.82	6.98	6.88	5.18	3.86	2.68	60.81
1932	3.04	2.38	4.34	5.47	4.64	5.54	6.88	7.64	5.56	5.93	6.60	3.49	61.51
1933	3.54	3.41	4.81	4.42	4.37	5.50	5.99	5.36	4.15	4.12	4.81	2.68	53.16
1934	3.38	2.01	3.72	3.70	4.16	2.84	4.46	4.44	4.62	6.40	4.28	4.08	48.09
1935	3.28	4.41	3.47	3.73	4.46	6.14	9.02	9.20	7.26	6.71	5.18	4.58	67.44
1936	4.28	2.35	4.78	4.62	6.97	7.36	8.36	8.32	7.74	6.09	6.53	3.94	71.34
1937	1.99	2.38	4.04	5.26	4.68	5.24	7.90	8.08	7.55	6.02	3.73	4.22	61.09
1938	3.96	2.49	3.00	3.71	4.37	4.44	6.10	7.00	7.00	5.15	4.72	2.77	54.71
1939	2.30	2.05	2.28	3.82	4.48	5.89	6.28	6.47	6.26	5.87	4.74	4.04	54.48
1940	2.06	2.48	3.72	3.31	5.00	5.06	7.68	6.34	6.06	5.31	4.74	3.47	55.23
1941	2.38	1.66	3.26	2.78	5.01	4.32	6.28	5.38	5.30	4.62	5.20	2.40	48.59
1942	3.10	2.85	4.22	2.28	3.94	[1]3.42	6.33	5.22	5.46	4.58	4.19	3.70	49.29
1943	3.67	2.70	1.88	2.68	4.94	5.26	6.38	6.48	6.30	4.77	4.92	2.17	52.15
1944	2.61	1.77	3.42	3.70	3.67	3.37	5.47	6.92	5.02	3.82	2.50	3.50	45.77
1945	3.46	2.02	2.04	3.67	3.94	2.58	5.10	6.25	5.30	3.56	4.42	3.06	45.40
Mean	3.11	2.49	3.66	3.86	4.61	4.87	6.67	6.67	6.03	5.21	4.69	3.38	55.25

* Pan located on west side of canyon above dam with trees and buildings nearby.
[1] Partly estimated.

TABLE 299

EVAPORATION AT SHASTA DAM, SHASTA COUNTY, CALIFORNIA

Station:
  Location ------------------About 9 miles north of Redding and 1,000 feet south of left abutment of Shasta Dam. Lat. 40° 43′ N., Long. 122° 25′ W.
  Elevation ------------------1,080 feet.
Evaporation pan:
  Type ----------------------U. S. Weather Bureau pan.
  Description ----------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data-------------U. S. Bureau of Reclamation.
Publication reference ----------U. S. Weather Bureau Climatological Data (41).
Meteorologic data -------------Temperature, wind.

Year and month	Evaporation in inches	Temperature in ° F.	Total wind in miles[1]	Year and month	Evaporation in inches	Temperature in ° F.	Total wind in miles[1]
1946				1946			
January	3.23	47	3,117	July	14.62	82	2,929
February	2.07	46	2,068	August	15.16	82	3,024
March	3.02	52	2,488	September	10.28	74	3,120
April	7.90	62	2,733	October	6.36	61	2,864
May	10.12	69	2,603	November	3.13	52	2,522
June	11.48	72	2,497	December	2.02	49	2,309
				Annual	89.39	62	32,274

[1] Anemometer cups 9 inches above top of pan.

TABLE 299-a

EVAPORATION AT SHASTA RESERVOIR, LAKESHORE, SHASTA COUNTY, CALIFORNIA

Station:
  Location ------------------About 20 miles north of Redding, on west side of Sacramento River arm of Shasta Reservoir, about 100 feet west of reservoir. Lat. 45° 53′ N., Long. 122° 23′ W.
  Elevation ------------------1,080 feet.
Evaporation pan:
  Type ----------------------U. S. Weather Bureau pan.
  Description ----------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data-------------U. S. Bureau of Reclamation.
Publication reference ----------None.
Meteorologic data -------------Temperature, wind.

Year and month	Evaporation in inches	Temperature in ° F.	Total wind in miles[1]	Year and month	Evaporation in inches	Temperature in ° F.	Total wind in miles[1]
1946				November	1.76	49	849
July	10.07	76	902	December	.95	46	413
August	10.05	73	800	1947			
September	6.76	64	760	January	1.25	44	296
October	3.17	53	724	February	1.56	51	143

[1] Anemometer cups about 8 inches above top of pan.

TABLE 300

EVAPORATION AT SILVER LAKE RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	At north end of Silver Lake, south of Los Angeles River and northwest of Elysian Park. Lat. 34° 05′ N., Long. 118° 16′ W.*
Elevation	Approx. 440 feet.
Evaporation pan:	
Type	Floating pan.
Description	Square, 30 x 30 inches, 18 inches deep, made of stainless steel.
Authority for data	Los Angeles Dept. of Water and Power.
Publication reference	Calif. Dept. of Pub. Wks. Bull. No. 44 (6).
Meteorologic data	Water temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	2.09	4.80	4.74	6.28	5.68	7.01	8.22	7.32	6.10	4.89	3.89	[1]1.69	62.71
1932	3.43	[1]1.83	4.30	5.63	5.50	6.27	7.19	7.52	5.59	5.03	3.79	2.33	58.41
1933	[1]1.80	2.65	3.72	4.69	5.49	6.77	7.42	7.38	5.15	4.51	3.89	2.31	55.78
1934	2.74	1.73	3.72	5.12	7.04	5.47	6.95	7.02	6.06	4.32	2.66	1.48	54.31
1935	1.42	2.39	2.82	2.83	5.14	6.19	7.22	7.27	6.00	5.34	3.13	2.09	51.84
1936	2.02	1.20	3.37	4.23	6.36	6.72	7.36	6.84	5.92	4.77	3.47	[1]1.60	53.86
1937	-------	(Reser	voir em	pty)	-------	-------	7.26	7.36	6.50	4.52	3.16	2.22	-------
1938	2.43	1.50	4.00	4.60	5.83	6.15	7.22	7.93	6.06	5.00	4.39	2.52	57.63
1939	3.72	2.53	3.36	4.59	6.30	6.79	7.98	7.06	6.36	6.24	3.59	2.63	61.15
1940	1.35	1.96	4.01	5.05	6.38	6.52	7.58	7.29	6.16	5.95	4.45	2.00	58.70
1941	1.88	1.93	1.11	3.90	7.00	6.04	7.46	6.66	5.96	4.78	3.43	2.25	52.40
1942	2.06	2.91	4.21	4.55	6.06	5.56	7.74	6.83	5.93	5.09	3.75	3.26	57.95
1943	2.64	2.07	2.27	4.64	6.62	6.74	7.73	7.36	6.74	5.19	3.88	1.75	57.63
1944	2.33	2.70	3.93	5.29	5.22	5.92	6.80	7.40	5.68	4.34	2.80	2.81	55.22
1945	[1]2.04	[1]1.90	[1]3.00	5.43	5.89	4.83	5.44	5.71	4.84	3.87	4.07	2.85	49.87
Mean	2.28	2.29	3.47	4.77	6.04	6.21	7.30	7.13	5.94	4.92	3.62	2.25	56.22

* Prevailing winds from the south absorb moisture in passing over the reservoir before passing over the evaporation pan.

[1] Partly estimated.

TABLE 301

WATER TEMPERATURES IN SILVER LAKE RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA[1]

Year	Mean water temperatures in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	84	83	78	72	63	55	-------
1932	53	57	66	71	72	76	79	80	76	70	66	57	69
1933	53	56	64	68	69	76	80	73	75	73	66	58	68
1934	58	61	69	73	77	75	80	80	78	71	65	59	70
1935	58	60	67	67	71	78	78	82	78	70	63	59	69
1936	57	59	66	68	75	78	82	81	78	73	66	60	70
1937	-------	-------	-------	-------	-------	77	80	81	79	74	66	61	-------
1938	60	60	62	68	72	76	80	81	79	72	62	60	69
1939	56	52	61	71	72	77	80	80	80	74	67	63	69
1940	58	60	65	70	75	76	80	80	78	74	65	60	70
1941	60	62	65	67	75	76	80	79	76	71	66	60	70
1942	59	60	65	67	71	75	82	80	76	72	65	60	69
1943	57	61	64	68	73	75	77	79	76	72	63	58	69
1944	56	57	62	68	70	74	75	81	77	70	65	57	68
1945	57	-------	-------	66	70	71	76	77	75	69	64	59	-------
Mean	57	59	65	69	72	76	80	80	77	72	65	59	69

[1] Water temperatures in the reservoir were recorded by spot readings at different times of day but should approximate average temperatures as temperatures of large bodies of water change slowly.

TABLE 302

EVAPORATION AT SILVER LAKE, SAN BERNARDINO COUNTY, CALIFORNIA

Station:

Location	At the town of Silver Lake on the Mojave Desert, 65 miles east of Barstow and 10 miles north of Baker. Lat. 35° 23′ N., Long. 116° 08′ W.
Elevation	905 feet.
Evaporation	Measured as change in lake surface.[1]
Authority for data	Div. of Irrig., SCS, U. S. Dept. of Agric.
Publication reference	None.
Meteorologic data	Temperature, wind.

Year and month	Evaporation from Silver Lake in inches	Mean temperature in ° F.		Total wind in miles
		Air	Lake	
1938				
May	[2]6.37	[3]80		[2]3,276
June	10.30	85	[4]82	5,112
July	10.33	92	81	5,172
August	9.89	93	86	4,059
September	7.59	88	82	3,159
October	5.68	68	66	3,621
November	3.84	51	49	3,766
December	2.21	52	49	3,023
1939				
January	2.37	49	47	4,110
February	4.68	47	45	5,419
March	5.70	60		4,772
Period total	68.96			45,489
Period mean		70	65	

[1] Silver Lake was formed within 2 or 3 days in March 1938 by a flood in the Mojave River, after which no more water entered. It was 8 feet at the deepest end, 7 miles long and about 2 miles wide. There was no outlet and the lake bottom was of fine silt, precluding seepage loss. Changes in water level were caused by evaporation. Occasional high winds occurred in winter months. The lake bed was entirely dry about a year after the flood.

[2] Total for the last 20 days in May.

[3] Average for last 14 days in May.

[4] Average for last 14 days in June.

TABLE 303

EVAPORATION AT SOUTH HAIWEE RESERVOIR, INYO COUNTY, CALIFORNIA

Station:
  Location ____________________Near Haiwee, south of Owens Lake. Lat. 36° 10′ N., Long. 117° 50′ W.
  Elevation ___________________Approx. 3,800 feet.
Evaporation pan:
  Type ________________________Ground pan.
  Description _________________Square, 3 x 3 feet, depth 18 inches, set in ground 15 inches.
Authority for data_____________Los Angeles Dept. of Water and Power.
Publication reference _________Calif. Dept. of Pub. Wks. Bull. 44 (6).
Meteorologic data _____________Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1924	[1]1.68	3.22	[1]5.32	5.33	9.04	9.30	10.85	9.98	7.10	[1]3.31	[1]2.28	[1]1.68	69.09
1925	1.75	2.27	3.19	6.49	6.46	9.15	9.28	7.07	6.35	3.53	2.45	1.24	59.23
1926	1.91	1.97	3.73	4.84	6.89	8.00	8.90	6.80	5.50	3.92	3.80	[1]2.54	58.80
1927	[1]1.75	[1]3.10	5.76	4.30	6.80	7.00	7.85	7.70	6.72	3.80	1.64	[1]1.35	57.77
1928	[1]1.00	[1]1.18	3.39	5.26	5.02	7.36	8.35	6.00	6.25	3.15	2.00	[1]1.65	50.61
1929	[1]1.75	1.94	3.71	4.22	6.10	5.80	8.15	7.11	6.61	4.70	2.50	1.81	54.40
1930	[1]1.00	[1]2.31	3.13	3.67	5.87	5.94	8.00	7.80	6.70	3.17	2.48	[1]1.13	51.20
1931	[1]1.75	[1]2.15	2.23	3.13	3.90	7.14	8.00	6.94	6.10	3.56	[1]2.57	[1]1.00	48.47
1932	[1]1.00	[1]1.52	5.10	6.95	7.00	8.05	12.80	11.63	8.45	3.95	2.44	1.96	70.85
1933	1.90	1.90	3.90	5.30	7.80	9.80	10.86	9.90	8.15	4.49	2.67	1.48	68.15
1934	1.18	2.41	4.02	6.23	7.70	7.65	10.12	8.47	6.71	5.66	2.76	1.93	64.84
1935	2.14	2.94	3.39	5.28	8.10	9.33	9.36	8.70	6.22	4.52	1.92	1.55	63.45
1936	1.55	1.73	3.98	4.97	7.92	8.56	8.87	8.62	6.77	5.17	1.83	1.81	61.78
1937	.80	1.56	3.16	4.85	7.05	8.54	9.68	10.54	7.08	4.16	2.19	2.83	62.44
1938	1.31	1.44	3.17	4.99	6.79	8.07	9.63	9.22	6.01	3.46	2.54	1.39	58.02
1939	1.37	2.35	3.31	6.20	8.74	11.22	11.20	9.84	6.18	5.11	2.32	1.35	69.19
1940	1.29	2.21	4.83	5.60	9.68	11.22	12.45	10.87	7.13	4.74	2.48	1.04	73.54
1941	1.91	2.24	2.58	4.40	8.40	10.02	11.29	8.12	6.96	4.28	2.31	.99	63.50
1942	1.21	2.37	3.99	4.94	8.52	10.86	11.70	10.42	6.92	5.07	2.44	1.43	69.87
1923	2.11	1.54	3.61	5.22	8.82	10.25	10.92	10.52	6.89	5.02	2.18	1.53	68.61
1944	.96	1.30	4.58	5.39	7.05	8.90	10.23	9.99	7.55	4.74	2.28	1.29	64.26
Mean	1.49	2.08	3.81	5.12	7.32	8.67	9.93	8.87	6.78	4.26	2.38	1.57	62.28

[1] Portion of record estimated.

TABLE 304

TEMPERATURE AT SOUTH HAIWEE RESERVOIR, INYO COUNTY, CALIFORNIA[1]

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1924	39	51	46	57	73	77	77	70	67	60	48	40	59
1925	42	49	52	55	65	72	81	77	68	60	48	46	60
1926	43	48	56	60	68	80	81	80	71	64	54	40	62
1927	42	46	50	57	66	75	82	78	70	63	53	41	60
1928	43	46	54	59	69	76	81	80	74	61	50	40	61
1929	41	42	51	54	67	72	82	84	71	64	52	48	61
1930	37	50	51	60	59	76	81	79	70	59	50	38	59
1931	42	47	54	61	62	69	85	81	70	61	46	38	60
1932	37	42	52	56	65	74	81	80	75	62	54	39	60
1933	36	37	52	60	62	81	91	86	80	72	54	41	63
1934	46	51	62	69	73	74	85	84	78	65	53	42	65
1935	40	48	48	58	66	83	81	76	69	55	44	40	59
1936	41	42	51	58	66	74	79	79	70	59	48	37	59
1937	22	38	47	53	66	72	80	80	73	60	50	44	57
1938	42	39	44	55	61	71	77	77	72	56	42	41	56
1939	40	38	50	62	68	75	82	82	71	60	53	48	61
1930	45	46	54	60	71	80	80	81	69	62	48	42	62
1941	43	47	50	52	66	71	68	75	68	56	50	41	57
1942	40	43	48	56	63	75	83	81	71	63	52	46	60
1943	44	47	53	60	68	70	81	78	75	63	50	41	61
1944	40	40	49	55	65	69	78	79	74	63	48	43	58
Mean	40	45	51	58	66	74	81	79	72	61	50	42	60

[1] Records by Los Angeles Department of Water and Power.

TABLE 305

WIND MOVEMENT AT SOUTH HAIWEE RESERVOIR, INYO COUNTY, CALIFORNIA[1]

Year	Mean wind in miles per hour												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1924	8.7	10.2	12.6	14.0	9.4	8.4	10.8	10.2	8.4	8.4	9.8	10.5	10.1
1925	8.3	9.9	10.1	10.1	15.2	12.4	11.8	8.3	15.1	9.3	11.8	15.5	11.5
1926	11.5	9.1	11.8	10.8	12.1	11.8	10.0	10.5	15.0	10.9	10.0	12.4	11.3
1927	9.2	10.7	11.0	12.5	13.2	11.1	10.0	10.3	9.1	7.1	6.7	6.8	9.8
1928	7.5	7.5	7.1	8.0	7.1	8.0	6.7	8.6	10.3	9.2	9.9	10.8	8.4
1929	9.5	12.2	11.4	9.4	8.9	7.2	6.2	8.4	7.1	6.2	7.2	7.9	8.5
1930	9.3	9.1	9.0	4.2	8.9	10.8	11.0	10.4	11.4	9.4	12.3	8.6	9.5
1931	9.4	7.9	10.2	11.9	10.1	9.3	9.8	8.3	8.6	8.3	11.0	9.1	9.5
1932	10.5	8.6	8.6	10.6	10.4	9.2	10.2	9.1	9.1	9.0	7.1	9.1	9.3
1933	9.9	9.6	9.7	9.1	11.5	10.1	12.8	8.0	7.8	6.8	10.0	8.7	9.5
1934	9.9	6.3	7.5	7.3	4.2	9.5	8.8	8.5	8.0	7.8	6.6	7.1	7.6
1935	8.8	13.7	9.7	10.5	10.3	9.6	9.2	8.3	8.0	9.8	8.8	7.7	9.5
1936	8.6	8.5	9.9	8.6	10.9	8.3	8.1	8.2	8.1	7.2	10.7	7.0	8.7
1937	8.7	9.1	8.9	10.4	8.5	10.3	8.3	9.9	8.3	7.0	7.1	9.4	8.8
1938	10.4	10.5	11.5	10.8	9.4	8.8	8.4	8.0	6.9	6.8	8.4	6.6	8.9
1939	9.4	11.9	8.6	8.9	9.9	10.2	8.4	7.4	7.2	8.3	5.7	6.1	8.5
1940	6.8	7.7	9.4	8.0	9.3	8.5	9.1	8.8	7.8	6.0	9.8	6.7	8.2
1941	8.2	6.3	8.7	8.9	9.2	9.6	7.0	6.9	7.8	8.5	7.1	7.8	8.0
1942	7.7	7.7	9.3	10.5	9.3	10.4	8.5	8.3	6.8	7.2	7.2	6.7	8.3
1943	9.2	7.5	7.5	8.5	10.1	9.6	6.8	8.2	5.8	6.8	5.9	8.6	7.9
1944	7.3	11.3	-------	-------	-------	-------	-------	8.3	8.1	7.6	9.8	6.9	-------
Mean	9.0	9.3	9.6	9.6	9.9	9.6	9.1	8.7	8.8	8.0	8.7	8.6	9.1

[1] Anemometer approximately 7 feet above ground surface. Records by Los Angeles Department of Water and Power.

TABLE 306

EVAPORATION AT STONE CANYON RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ------------------Northwest of Beverly Hills. Lat. 34° 06′ N., Long. 118° 27′ W.
Elevation ------------------840 feet.
Evaporation pan:
Type ----------------------Floating pan.
Description ---------------Square, 30 x 30 inches, depth 18 inches.
Authority for data-------------Los Angeles Dept. of Water and Power.
Publication reference ---------None.
Meteorologic data ------------Water temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	3.00	[1]1.56	5.25	[1]4.30	4.74	6.16	7.56	7.00	6.51	5.41	4.68	3.10	59.27
1932	2.67	2.85	3.19	4.75	4.93	5.57	6.29	6.98	4.86	5.32	5.47	3.11	55.99
1933	3.00	3.36	2.99	4.56	4.34	5.52	6.83	6.80	4.61	4.91	5.04	2.97	54.93
1934	2.89	1.20	3.54	4.66	5.87	4.43	6.04	6.46	5.92	4.63	2.60	1.91	50.15
1935	1.10	2.00	2.29	3.16	4.01	4.91	6.42	6.85	6.10	5.51	2.96	2.04	47.35
1936	2.38	1.27	2.64	4.44	4.62	5.57	7.28	7.41	6.28	4.25	4.07	2.18	52.39
1937	1.94	1.40	2.12	3.29	3.86	4.99	6.95	7.26	6.61	4.88	3.16	3.02	49.48
1938	2.25	1.00	2.76	3.19	4.24	3.93	5.71	7.73	4.01	5.24	5.03	2.16	47.25
Mean	2.40	1.83	3.10	4.04	4.58	5.14	6.64	7.06	5.61	5.02	4.13	2.56	52.11

[1] Estimated.

TABLE 307

WATER TEMPERATURES AT STONE CANYON RESERVOIR, LOS ANGELES COUNTY, CALIFORNIA[1]

Year	Temperature in ° F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	------	------	------	------	------	------	81	80	75	70	63	54	------
1932	52	53	59	64	69	73	76	77	74	68	63	56	65
1933	51	51	58	63	65	72	77	78	71	70	63	57	65
1934	54	55	63	66	73	72	78	77	75	70	64	57	67
1935	55	56	57	62	68	74	77	80	77	70	61	57	66
1936	54	54	61	64	70	74	80	81	77	71	63	58	67
1937	51	52	56	64	67	73	79	80	77	72	65	59	66
1938	56	53	57	63	69	72	76	80	77	70	60	55	66
Mean	53	53	59	64	69	73	78	79	75	70	63	57	66

[1] These data are not strictly mean water temperatures as they represent spot readings not always taken at the same time of day and are not average maximum and minimum temperatures.

TABLE 308

EVAPORATION AT STONY GORGE RESERVOIR, GLENN COUNTY, CALIFORNIA

Station:
Location ---------- At Stony Gorge Dam, Orland Project. Lat. 39° 36′ N., Long. 122° 32′ W.[1]
Elevation ---------- 880 feet originally, changed to 800 feet two or three years after beginning of records.

Evaporation pan:
Type ---------- Ground pan.
Description ---------- Diameter 4 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data ---------- U. S. Bureau of Reclamation, Orland Project.
Publication reference ---------- None.
Meteorologic data ---------- Temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	------	------	------	------	------	------	11.35	9.75	6.42	4.64	2.76	0.84	------
1932	1.08	1.84	3.16	4.36	6.02	8.55	10.52	9.30	7.30	5.00	2.60	.76	60.49
1933	.56	1.68	2.48	5.28	5.88	8.67	10.77	9.65	7.11	5.59	3.28	.64	61.59
1934	1.08	.92	2.04	3.89	5.80	7.56	9.57	8.42	7.37	4.23	1.00	1.04	52.92
1935	.68	1.29	1.92	2.04	4.96	7.60	8.83	8.42	6.00	3.56	1.40	.85	47.55
1936	.80	.56	2.56	2.68	5.73	6.00	8.43	8.38	6.83	4.76	2.68	1.40	50.81
1937	.20	.80	1.40	3.76	6.52	6.94	9.10	8.25	6.57	3.08	.92	.84	48.38
1938	.60	------	------	1.84	5.46	7.79	9.16	8.26	5.91	2.72	2.20	1.16	------
1939	.92	1.69	2.44	5.08	6.02	8.95	9.86	9.08	5.39	3.80	2.64	.92	56.79
1940	.56	.60	1.50	2.20	5.68	8.18	7.74	8.38	4.76	3.48	1.56	1.76	46.40
1941	.62	.32	2.00	1.72	3.56	6.14	8.66	7.31	6.30	3.59	1.56	.72	42.50
1942	.80	1.04	2.24	1.48	4.00	7.73	8.80	8.52	6.06	4.24	1.84	.72	47.47
1943	.88	.82	1.44	2.92	5.80	6.67	8.73	8.51	6.55	3.87	1.92	1.56	49.67
1944	.96	1.08	2.72	2.52	5.36	5.35	8.96	8.70	7.13	3.60	1.08	.96	48.42
Mean	.75	1.05	2.16	3.06	5.44	7.39	9.32	8.64	6.41	4.01	1.96	1.01	51.20

[1] For two or three years the ground pan was located on a sloping hillside above the dam but was then moved to a location below the dam. The records for 1931-33 are higher than subsequent records and it is believed by the Project Superintendent that spray from the needle valves may have resulted in greater humidity in the vicinity of the pan and a lower rate of evaporation after it was moved.

TABLE 309

TEMPERATURE AT STONY GORGE RESERVOIR, GLENN COUNTY, CALIFORNIA

Year	Mean temperature in ° F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1929	42	45	52	53	66	72	78	77	69	63	54	50	60
1930	40	50	52	56	60	72	79	75	64	59	50	41	58
1931	43	48	52	62	72	73	85	80	69	61	49	41	61
1932	43	45	55	54	64	76	78	78	77	65	56	40	61
1933	41	44	52	58	61	73	84	81	69	68	56	44	61
1934	48	50	59	62	67	72	78	79	73	62	51	45	62
1935	44	48	46	55	63	75	77	79	73	60	48	46	60
1936	47	47	56	59	61	71	80	79	73	65	54	41	61
1937	34	43	51	55	66	72	80	77	71	62	52	47	59
1938	46	46	49	55	61	76	80	76	73	61	50	48	60
1939	45	44	54	63	66	74	80	79	72	61	53	48	62
1940	47	50	54	57	68	78	77	78	68	62	51	48	60
1941	46	49	54	53	64	70	80	75	68	59	53	45	60
1942	45	46	49	53	60	72	79	78	71	63	51	45	59
1943	45	49	53	58	66	68	79	74	73	60	53	47	60
1944	44	46	53	53	64	70	78	78	75	64	49	48	60
Mean	44	47	52	57	64	73	80	78	71	62	52	45	60

TABLE 310

EVAPORATION AT SWEETWATER RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ------------------On Sweetwater River about 10 miles from the Pacific Ocean. Lat. 32° 41′ N., Long. 117° 01′ W.
  Elevation ------------------240 feet.
Evaporation pan:
  Type ----------------------Floating pan.
  Description ----------------Section of a 36-inch pipe closed at the bottom and fastened to a float. Depth unknown.
Authority for data-------------Sweetwater Water Company.
Publication reference ----------Water Supply Paper 446 (12).
Meteorologic data -------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1889	1.99	3.34	3.38	4.96	5.82	6.81	7.40	8.25	7.36	[1]3.00	4.80	[1]0.25	57.36
1890	1.59	2.21	3.28	4.14	6.14	7.30	7.38	9.02	6.48	4.92	5.54	1.85	59.85
1891	3.61	1.35	3.08	3.71	5.60	6.03	6.50	8.89	6.15	6.31	4.10	2.75	58.08
1892	2.54	1.39	3.08	5.82	4.67	6.48	8.81	6.54	6.27	6.56	4.77	2.61	59.54
Mean	2.43	2.07	3.20	4.66	5.56	6.66	7.52	8.18	6.56	5.20	4.80	1.86	58.70

[1] Heavy rains in this month.

TABLE 311

EVAPORATION AT SWEETWATER RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ------------------On Sweetwater River about 10 miles from the Pacific Ocean. Lat. 32° 41′ N., Long. 117° 01′ W.
  Elevation -----------------240 feet.
Evaporation pan:
  Type ----------------------Floating pan.
  Description ---------------Square, 3 x 3 feet, depth 18 inches.
Authority for data------------Sweetwater Water Company.
Publication reference ---------Unpublished report by George Cromwell, Engr. for San Diego County Water Company (11).
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1916	-------	-------	-------	-------	7.24	7.20	7.58	7.63	-------	-------	-------	-------	-------
1917	-------	-------	3.88	4.06	4.84	6.89	7.79	8.12	7.39	5.16	3.61	3.49	-------
1918	1.57	1.33	.98	4.22	5.69	6.94	8.14	7.07	6.04	3.47	2.10	-------	-------
1919	-------	-------	1.99	2.59	3.01	4.09	4.92	6.18	4.88	4.88	4.07	3.02	-------
1920	2.20	2.23	2.81	4.00	5.38	6.64	7.46	7.50	6.64	4.73	4.20	2.71	56.50
Mean	1.88	1.78	2.42	3.72	5.23	6.35	7.18	7.30	6.24	4.56	3.50	3.07	53.23

TABLE 312

EVAPORATION AT SWEETWATER RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:
  Location ------------------On Sweetwater River about 10 miles from the Pacific Ocean. Lat. 32° 41′ N., Long. 117° 01′ W.
  Elevation -----------------240 feet.
Evaporation pan:
  Type ----------------------Ground pan.
  Description ---------------Square, 3 x 3 feet, depth 18 inches, set in ground 15 inches.
Authority for data------------California Water and Telephone Company.
Publication reference ---------None.
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1943	-------	-------	2.85	3.83	6.38	6.82	7.50	7.05	5.32	3.88	3.74	1.82	-------
1944	1.94	2.09	4.33	5.58	6.37	7.10	9.09	8.84	6.34	4.91	2.62	2.38	61.59
1945	2.40	2.38	2.65	5.26	7.09	6.57	8.23	8.07	6.79	5.10	4.42	2.54	61.50
1946	3.80	2.80	3.60	4.74	-------	-------	-------	-------	-------	-------	-------	-------	-------
Mean	2.71	2.42	3.35	4.85	6.61	6.83	8.27	7.98	6.15	4.63	3.59	2.25	59.64

TABLE 313

EVAPORATION AT TANBARK FLAT, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	At field headquarters of San Dimas Experimental Forest. Lat. 34° 12′ N., Long. 117° 46′ W.*
Elevation	2,680 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	California Forest and Range Experiment Station, San Dimas Experimental Forest.
Publication reference	None.
Meteorologic data	Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1938	-------	-------	-------	-------	-------	-------	-------	-------	-------	5.62	6.00	3.26	-------
1939	2.78	2.89	3.96	5.26	5.53	7.89	9.56	11.58	8.32	6.44	4.53	3.66	72.40
1940	2.45	2.63	4.49	4.88	7.24	8.79	11.85	12.07	8.65	6.96	[1]4.00	[1]2.00	76.01
1941	[1]1.50	1.71	2.77	3.35	6.61	6.82	10.19	8.06	7.42	4.87	4.30	1.94	59.54
1942	2.58	3.12	4.70	3.27	6.55	7.73	11.89	10.35	9.03	6.10	4.12	3.44	72.88
1943	3.68	3.09	2.74	4.41	6.77	7.14	9.91	9.38	9.14	-------	-------	-------	-------
Mean	2.60	2.69	3.73	4.23	6.54	7.67	10.68	10.29	8.51	6.00	4.59	2.86	70.39

* This station was located in a 20 foot square area surrounded by chaparral. It was partly protected by slopes on three sides but exposed to prevailing wind on the west.

[1] Partly estimated.

TABLE 314

EVAPORATION AT TANBARK FLAT, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	At field headquarters of San Dimas Experimental Forest. Lat. 34° 12′ N., Long. 117° 46′ W.
Elevation	2,680 feet.
Evaporation pan:	
Type	Ground pan.
Description	Diameter 35.68 inches, area 1,000 square inches, depth 18 inches, set in ground 15 inches.
Authority for data	California Forest and Range Experiment Station, San Dimas Experimental Forest.
Publication reference	None.
Meteorologic data	Temperature, wind.

Year	Evaporation in inches[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935	-------	-------	-------	-------	-------	-------	9.68	-------	8.66	5.15	3.48	2.85	-------
1936	2.49	2.11	3.24	4.60	6.58	8.89	9.48	9.44	7.73	5.13	3.56	2.52	65.77
1937	2.13	2.06	3.16	4.25	5.64	8.44	10.09	9.82	7.70	5.63	2.38	1.96	63.26
1938	1.95	1.16	2.61	4.06	5.92	7.20	9.63	9.49	8.29	4.89	5.06	2.59	62.85
1939	2.57	2.88	3.03	4.52	5.33	7.68	9.44	10.22	6.63	5.55	3.84	2.96	64.65
1940	1.86	2.14	3.79	4.20	6.76	8.19	10.48	10.16	7.63	5.95	3.58	2.18	66.92
Mean	2.20	2.07	3.17	4.33	6.05	8.08	9.80	9.82	7.77	5.38	3.65	2.51	64.83

[1] These values, except July, August and September, 1938, were interpolated from data at the "old" Tanbark Flat Climatic Station on the basis of comparison of later data taken simultaneously at both places.

TABLE 315

EVAPORATION AT TANBARK FLAT, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA

Station:	
Location	At field headquarters of San Dimas Experimental Forest. Lat. 34° 12′ N., Long. 117° 46′ W.
Elevation	2,680 feet.
Evaporation pan:	
Type	Shallow black pan evaporimeter.
Description	Diameter 25.3 inches, depth one inch, painted black, mounted on a Fergusson rain gage recording mechanism.
Authority for data	California Forest and Range Experiment Station, San Dimas Experimental Forest.
Publication reference	None.
Meteorologic data	Temperature, wind.

Year	Evaporation in inches[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1937	-------	-------	-------	-------	-------	10.30	12.07	12.04	10.89	9.07	6.04	4.50	-------
1938	4.40	4.16	4.77	7.56	9.92	9.33	11.59	11.05	10.56	7.26	8.81	6.29	95.70
1939	4.25	3.08	6.73	8.19	6.60	9.67	12.21	11.32	8.55	8.62	5.52	4.84	89.58
1940	2.73	4.41	6.20	7.26	8.49	9.57	12.43	12.18	9.39	8.65	5.61	5.42	92.34
1941	2.76	2.44	3.88	5.46	6.82	8.40	11.41	9.30	8.52	7.22	5.34	3.35	74.90
1942	3.66	3.95	7.56	5.91	8.56	10.11	14.60	12.43	10.77	7.59	5.31	4.70	95.05
1943	4.43	4.33	4.00	5.72	9.17	9.45	12.25	11.30	11.51	-------	-------	-------	-------
Mean	3.70	3.73	5.52	6.68	8.26	9.55	12.36	11.37	10.03	8.08	6.10	4.85	90.23

[1] From June, 1937, to September, 1938, inclusive, values were interpolated from data obtained at the "old" Tanbark Flat Climatic Station on the basis of comparison of later data taken simultaneously at both places.

TABLE 316

TEMPERATURE AT TANBARK FLAT, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA

Year	Mean temperature in ° F.[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	51	51	60	60	62	61	73	72	68	60	51	49	60
1935	47	49	45	51	54	64	69	72	69	57	49	48	56
1936	47	46	52	54	59	67	73	73	68	59	54	47	59
1937	36	46	49	54	60	67	72	77	73	65	56	54	59
1938	51	46	46	52	58	62	71	71	71	58	52	57	58
1939	46	42	49	57	56	65	72	75	70	63	58	55	59
1940	50	48	53	54	60	65	70	72	65	63	55	53	59
1941	48	50	51	51	61	61	72	68	63	56	56	45	57
1942	49	44	49	48	54	62	74	80	67	-------	-------	-------	-------
Mean	47	47	50	53	58	64	72	73	68	60	64	51	58

[1] From June, 1934, to September, 1937, inclusive, values were interpolated from data obtained at the "old" Tanbark Flat Climatic Station on the basis of comparison with later data taken simultaneously at both places.

TABLE 317

WIND MOVEMENT AT TANBARK FLAT, SAN DIMAS EXPERIMENTAL FOREST, LOS ANGELES COUNTY, CALIFORNIA

Year	Total wind in miles[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1938	-------	-------	-------	-------	-------	-------	2 432	2,003	2,373	1,612	2,223	1,807	-------
1939	1,834	1,864	1,665	1,855	1,769	2,326	1,167	1,747	1,810	2,307	1,932	1,676	21,952
1940	1,840	1,941	2,231	1,789	2,043	2,336	2,594	2,558	2,403	-------	-------	-------	-------
Mean	1,837	1,902	1,948	1,822	1,906	2,331	2,064	2,103	2,195	1,960	2,078	1,742	23,889

[1] Anemometer 7 feet above ground surface.

TABLE 318

EVAPORATION AT TELEGRAPH AND COLLINS ROADS, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ------------------ Near intersection of Telegraph Road and Collins Road in southeast Los Angeles.
Elevation ------------------ 145 feet.
Evaporation pan:
Type ---------------------- Ground pan.
Description ---------------- Diameter 6 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data ------------- San Gabriel Valley Protective Association.
Publication reference ---------- Calif. Dept. of Pub. Wks. Bull. No. 44 (6).
Meteorologic data ------------- None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1929	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	2.53	1.82	-------
1930	1.14	1.64	2.70	4.06	4.49	4.99	6.58	5.78	4.15	3.45	2.47	1.57	43.02
1931	1.14	1.76	3.79	3.90	4.52	5.33	6.46	5.65	4.72	3.11	1.92	.78	43.08
Mean	1.14	1.70	3.24	3.98	4.50	5.16	6.52	5.72	4.44	3.28	2.31	1.39	43.38

TABLE 319

EVAPORATION AT TINEMAHA RESERVOIR, INYO COUNTY, CALIFORNIA

Station:
  Location ------------------In Owens Valley, 10-15 miles south of Big Pine. Approx. Lat. 37° 05′ N., Long. 118° 15′ W.
  Elevation ------------------Approx. 3,870 feet.
Evaporation pan:
  Type ----------------------Ground pan.
  Description ---------------Square, 3 x 3 feet, depth 18 inches, set in ground 15 inches.
Authority for data------------Los Angeles Dept. of Water and Power.
Publication reference ---------None.
Meteorologic data ------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934---	2.90	2.57	5.05	7.98	10.41	11.38	14.55	13.84	11.06	6.88	3.74	2.90	93.26
1935---	1.37	3.60	5.49	8.39	11.21	13.66	13.50	12.85	10.31	6.90	4.47	2.24	93.99
1936---	2.63	1.50	6.77	8.67	12.08	13.21	13.67	12.52	10.52	6.19	4.64	2.48	94.88
1937---	[1]1.10	[1]1.75	5.03	8.08	10.95	12.87	13.75	13.38	10.45	6.98	4.20	3.35	91.89
1938---	[1]1.70	[1]2.28	3.88	7.22	9.17	11.53	11.98	11.52	8.53	5.32	3.95	2.36	79.44
1939---	2.21	3.02	4.77	8.15	10.90	13.36	13.73	12.41	8.50	6.73	3.86	2.45	90.09
1940---	1.58	2.32	5.93	7.82	11.34	13.90	14.62	13.12	9.48	5.47	3.62	1.59	90.79
1941---	1.67	1.77	4.83	5.41	10.60	11.88	13.10	10.76	9.18	4.88	3.64	[1]1.00	78.72
1942---	.87	3.10	5.64	7.42	10.08	12.70	14.44	12.85	10.07	7.66	4.40	3.14	92.37
1943---	2.70	3.15	4.85	7.62	10.73	11.85	13.92	13.66	10.16	7.26	4.22	1.90	92.02
1944---	1.93	1.69	5.73	8.03	10.12	11.53	14.68	13.94	11.30	7.04	4.07	2.71	92.77
Mean--	1.88	2.43	5.27	7.71	10.69	12.53	15.81	12.80	9.96	6.48	4.07	2.37	90.00

[1] Estimated.

TABLE 320

EVAPORATION AT TINEMAHA RESERVOIR, INYO COUNTY, CALIFORNIA

Station:
  Location ------------------In Owens Valley, 10-15 miles south of Big Pine. Approx. Lat. 37° 05′ N., Long. 118° 15′ W.
  Elevation ------------------3,870 feet at spillway level.
Evaporation pan:
  Type ----------------------Floating pan.
  Description ---------------Square, 3 x 3 feet, 18 inches deep.
Authority for data------------Los Angeles Dept. of Water and Power.
Publication reference ---------None.
Meteorologic data ------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935---	-------	-------	-------	-------	-------	-------	-------	9.26	8.48	4.67	2.54	1.16	-------
1936---	1.23	1.49	5.33	7.77	[1]9.00	[1]10.60	[1]11.00	[1]10.20	[1]8.50	[1]5.00	[1]3.80	[1]2.00	75.92
1937---	[1] .89	[1]1.42	[1]4.07	7.77	10.62	10.01	11.13	9.77	8.05	5.61	3.03	2.10	74.47
1938---	[1]1.56	[1]2.10	[1]3.57	6.92	9.02	10.23	11.12	10.19	8.50	5.18	2.82	1.72	72.93
1939---	1.43	2.06	4.13	7.72	10.29	11.88	11.53	10.24	8.11	5.46	3.00	1.93	77.78
1940---	1.02	1.68	5.63	7.90	10.72	11.90	12.90	10.10	8.90	4.36	2.40	1.00	78.51
1941---	.95	1.49	4.57	5.51	9.56	9.81	10.14	8.86	6.16	3.80	2.48	1.16	64.49
1942---	[1] .78	[1]2.79	5.00	7.82	9.20	10.60	11.60	9.20	8.66	6.45	3.34	1.90	77.34
1943---	-------	2.67	5.01	7.32	9.71	9.91	11.08	11.10	-------	-------	-------	1.22	-------
1944---	1.29	1.65	5.05	6.80	9.24	9.88	-------	-------	-------	-------	2.97	1.43	-------
Mean--	1.14	1.93	4.71	7.28	9.71	10.54	11.31	9.88	8.17	5.07	2.93	1.56	74.23

[1] Estimated.

TABLE 321

TEMPERATURE AT TINEMAHA RESERVOIR, INYO COUNTY, CALIFORNIA

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934---	46	46	58	63	68	69	80	80	72	59	49	41	61
1935---	39	45	45	54	63	79	77	78	73	57	44	40	58
1936---	41	41	51	59	66	74	81	79	70	59	50	38	59
1937---	18	35	47	54	67	73	80	78	72	61	49	44	57
1938---	43	40	44	55	62	72	78	78	71	56	44	43	57
1939---	41	37	49	60	66	73	80	79	69	58	50	45	59
1940---	42	43	52	58	70	78	76	78	66	58	45	40	59
1941---	41	45	49	51	64	69	77	74	64	54	48	41	56
1942---	36	40	47	56	61	72	80	78	68	61	50	44	58
1943---	41	45	51	58	64	70	76	73	70	59	47	40	58
1944---	38	37	47	53	62	65	74	75	71	59	45	41	56
Mean--	39	41	49	56	65	72	78	77	70	58	47	42	58

TABLE 322

WIND MOVEMENT AT TINEMAHA RESERVOIR, INYO COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934---	10,118	5,091	6,622	8,064	8,184	-------	7,217	6,770	6,336	6,473	5,904	6,919	-------
1935---	5,729	5,548	7.589	7,776	7,366	6,984	7,217	7,217	5,760	7,366	7,272	5,654	81,478
1936---	6,101	5,424	8,258	7 416	7 961	7,416	7,068	6,473	6,120	6,398	6,480	6,473	81,588
1937---	7,886	4,462	7,514	8,208	7,366	7,128	6,994	6,473	6,480	6,101	5,328	6,622	80,562
1938---	6,919	6,467	8,556	7,488	7,812	7,488	6,324	6,398	6,120	6,250	8,496	6,175	84,493
1939---	7,366	6,692	7,366	7,344	7,886	7,488	6,845	6,026	6,552	7,514	5,472	5,506	82,057
1940---	4,762	5,185	6,994	7,488	7,217	7,344	7,514	6,473	7,992	6,026	6,768	5,059	78,822
1941---	5,134	4,462	7,812	6,696	8,556	8,280	6,845	6,622	-------	7,366	5,616	5,580	-------
1942---	5,357	6,464	7,738	9,432	7,738	7,200	6,845	6,324	7,704	6,919	6,048	5,654	83,423
1943---	6,101	5,091	6,547	8,712	7,961	7,632	7,068	7,366	5,760	6,622	5,976	6,175	81,011
1944---	5,803	6,318	9,523	8,928	7,514	7,560	6,919	6,622	7,560	6,175	7,560	5,729	86,211
Mean--	6,480	5,564	7,684	7,959	7,778	7,452	6,987	6,615	6,638	6,655	6,447	5,959	82,218

[1] Anemometer approximately 7 feet above ground.

TABLE 323

EVAPORATION AT TORRANCE, LOS ANGELES COUNTY, CALIFORNIA

Station:
Location ------------------At Southern California Edison Company Substation. Lat. 33° 52′ N., Long. 118° 19′ W.*
Elevation ------------------57 feet.
Evaporation pan:
Type ----------------------Ground pan.
Description ---------------Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data---------Los Angeles County Flood Control District.
Publication reference ---------Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data -----------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	-------	-------	6.92	5.17	2.32	1.22	-------
1932	1.16	1.47	4.24	6.16	6.66	6.96	7.64	7.60	5.58	4.32	2.52	1.61	55.92
1933	1.18	2.08	4.12	4.94	7.10	6.10	7.03	7.32	5.43	4.34	2.72	.98	53.34
1934	1.10	1.16	3.78	5.58	8.01	5.93	7.89	7.81	6.64	4.58	1.72	1.12	55.32
1935	-------	1.84	2.80	3.96	6.06	6.06	8.15	7.61	5.88	4.90	2.14	1.32	-------
1936	1.72	1.76	3.91	4.48	7.17	7.64	8.38	8.00	6.86	4.70	2.31	1.16	58.09
1937	1.00	1.41	3.96	5.52	6.04	7.32	8.49	7.70	7.11	5.15	2.08	1.80	57.58
1938	1.65	1.42	4.50	5.38	6.84	7.02	8.54	8.24	7.41	4.88	3.03	[1]1.24	60.15
1939	[2]1.06	2.39	3.16	5.22	6.40	7.34	8.25	7.60	7.54	5.02	1.52	1.02	56.52
1940	.91	1.34	3.68	5.34	6.88	6.54	8.62	7.94	6.60	4.58	2.30	1.20	55.93
1941	.75	-------	2.91	4.12	7.88	7.25	7.82	6.98	6.54	4.65	1.85	1.22	-------
1942	.88	1.52	4.31	4.00	6.58	5.90	8.15	7.30	5.66	4.07	1.48	1.26	51.11
1943	1.11	1.27	2.70	4.13	6.59	7.13	7.51	7.60	6.26	4.18	1.88	1.08	51.44
1944	.92	1.08	4.10	5.48	5.32	6.28	6.75	7.14	5.24	3.87	1.09	1.24	48.51
1945	1.06	1.52	2.85	5.02	6.67	5.28	7.10	7.82	6.66	4.40	1.94	1.14	51.46
Mean	1.12	1.56	3.64	4.95	6.73	6.62	7.88	7.62	6.42	4.59	2.06	1.24	54.43

[1] Incomplete.
[2] Partly estimated.
* Evaporation station located on the Coastal Plain between a heavy link fence on the north and a large 2-story building on the south 50 feet distant, both obstructions offering some protection against wind.

TABLE 324

EVAPORATION AT TRONA, SAN BERNARDINO COUNTY, CALIFORNIA

Station:
Location ____________________Near north end of dry bed of Searles Lake in Mojave Desert. Lat. 35° 46′ N., Long. 117° 22′ W.
Elevation ____________________1,623 feet.
Evaporation pan:
Type ____________________U. S. Weather Bureau pan.
Description ____________________Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data____________U. S. Weather Bureau.
Publication reference __________None.
Meteorologic data ____________Temperature.

Month	Evaporation in inches					Mean temperature in ° F.				
	1920	1921	1922	1923	Mean	1920	1921	1922	1923	Mean
January	--------	2.16	2.69	2.37	2.41	--------	43	40	44	42
February	--------	4.41	3.20	4.11	3.91	--------	52	46	48	49
March	--------	7.54	7.00	8.41	7.65	--------	59	53	56	56
April	--------	10.98	10.31	9.74	10.34	--------	62	59	61	61
May	--------	10.88	13.72	15.66	13.42	--------	67	71	73	70
June	13.05	16.17	16.80	15.26	15.32	80	82	82	75	80
July	15.56	18.53	17.21	--------	17.10	88	89	89	--------	89
August	14.02	14.77	15.46	--------	14.81	86	86	85	--------	86
September	11.97	11.42	11.64	--------	11.68	76	77	81	--------	78
October	8.05	7.04	7.42	--------	7.50	61	68	65	--------	65
November	3.30	3.61	3.74	--------	3.55	52	54	48	--------	51
December	2.38	3.16	2.31	--------	2.62	43	48	48	--------	46
Annual	--------	110.67	111.50	--------	110.31	--------	66	64	--------	64

TABLE 325

EVAPORATION AT TULARE, TULARE COUNTY, CALIFORNIA

Station:
Location ____________________At California Agricultural Experiment Substation at Tulare. Lat. 36° 11′ N., Long. 119° 19′ W.
Elevation ____________________287 feet.
Evaporation pan:
Type ____________________Ground pan.
Description ____________________Circular, diameter between 22 and 36 inches, depth 30 inches, set in ground 29 inches.
Authority for data____________U. S. Dept. of Agric. Office of Exp. Sta.
Publication reference __________U. S. Dept. of Agric. Office of Exp. Sta. Bull. 177 (13).
Meteorologic data ____________None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1903	-------	-------	-------	-------	-------	-------	-------	12.34	9.05	6.32	3.51	2.00	-------
1904	1.46	2.98	3.80	4.63	7.95	10.66	12.20	12.00	8.66	4.25	3.88	2.00	74.47
1905	1.46	2.50	2.90	3.32	6.80	10.34	11.07	7.60	6.25	4.82	3.88	2.00	62.94
Mean	1.46	2.74	3.35	3.98	7.38	10.50	11.64	10.65	7.99	5.13	3.76	2.00	70.58

TABLE 326

EVAPORATION AT TUJUNGA SPREADING GROUNDS, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ____________________Los Angeles Dept. of Water and Power spreading grounds in San Fernando Valley. Lat. 34° 13′ N., Long. 118° 25′ W.
  Elevation __________________815 feet.
Evaporation pan:
  Type _______________________U. S. Weather Bureau pan.
  Description ________________Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data_____________Los Angeles Dept. of Water and Power.
Publication reference __________None.
Meteorologic data _____________Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1933	2.00	5.26	6.67	6.39	8.78	9.12	11.11	9.21	7.19	6.44	6.47	3.64	82.28
1934	4.88	3.30	6.74	7.51	8.48	6.12	9.56	9.08	7.84	5.60	3.74	4.03	76.88
1935	2.70	3.47	3.62	4.58	5.99	7.43	9.84	9.45	7.01	6.38	3.28	3.06	66.81
1936	3.39	2.31	5.11	5.50	8.44	9.77	10.38	10.12	8.00	5.62	5.34	3.32	77.30
1937	2.49	2.99	4.80	7.03	6.19	8.26	9.89	9.46	7.92	5.95	3.11	3.46	71.55
1938	3.75	3.00	5.76	6.89	8.08	7.52	10.33	10.61	9.27	6.36	6.46	3.52	81.55
1939	3.20	3.29	3.75	6.67	7.72	9.12	10.24	9.92	9.14	6.97	4.23	4.21	78.46
1940	2.54	2.92	5.33	7.76	7.92	8.52	11.59	9.33	7.66	6.03	5.21	4.88	79.69
1941	2.41	5.89	3.21	4.96	8.73	7.61	10.43	8.22	3.21	4.21	4.88	4.77	68.53
1942	3.00	3.82	5.80	4.46	7.30	7.59	10.81	10.37	6.67	6.10	3.88	3.08	72.88
1943	4.09	3.85	3.43	5.30	8.50	9.01	9.70	9.39	8.22	5.38	4.85	2.44	74.16
1944	2.62	2.84	6.47	6.01	6.11	6.41	8.14	10.03	6.40	4.44	3.10	3.27	65.84
Mean	3.09	3.58	5.06	6.09	7.68	8.04	10.17	9.60	7.38	5.79	4.54	3.64	74.66

TABLE 327

TEMPERATURE AT TUJUNGA SPREADING GROUNDS, LOS ANGELES COUNTY, CALIFORNIA

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1933	------	------	------	------	------	------	------	------	65	67	63	54	------
1934	56	56	64	63	66	63	75	72	71	65	59	55	64
1935	51	55	51	58	60	67	71	76	70	63	55	54	61
1936	54	52	58	60	64	69	75	74	70	65	62	54	63
1937	42	50	54	58	63	66	73	73	71	65	57	56	61
1938	55	52	53	57	61	64	70	73	73	62	55	60	61
1939	50	47	53	60	60	65	71	72	73	65	60	58	61
1940	53	52	56	59	64	65	70	70	67	64	57	55	61
1941	52	54	56	55	65	64	70	69	64	61	60	51	60
1942	52	50	53	56	60	63	72	71	66	64	58	53	60
1943	52	55	55	58	63	64	70	70	70	64	58	52	61
1944	50	48	55	55	60	61	67	71	68	62	53	54	59
Mean	52	52	55	58	62	65	71	72	69	64	58	55	61

TABLE 328

WIND MOVEMENT AT TUJUNGA SPREADING GROUNDS, LOS ANGELES COUNTY, CALIFORNIA[1]

Year	Mean wind in miles per hour												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1933	-------	-------	-------	-------	-------	-------	-------	-------	3.94	3.73	4.61	4.86	-------
1934	5.31	4.52	4.30	4.54	4.72	4.51	4.50	4.35	4.04	3.98	5.20	5.09	4.59
1935	4.75	4.92	4.09	3.68	4.04	3.85	3.72	3.39	3.07	4.13	3.11	3.68	3.87
1936	4.26	4.77	5.16	4.86	5.13	5.52	4.85	4.61	4.41	4.20	4.80	4.98	4.80
1937	5.55	6.40	4.65	5.39	3.85	4.69	4.96	4.26	3.37	3.53	2.89	4.98	4.54
1938	4.57	5.85	-------	-------	-------	-------	-------	4.25	4.02	3.61	5.19	4.94	-------
1939	4.67	6.11	4.00	4.47	4.51	4.59	4.40	4.09	4.49	3.94	3.49	3.80	4.38
1940	3.39	4.25	4.15	4.11	3.96	4.38	4.34	3.97	3.83	3.59	4.08	3.65	3.98
1941	4.06	4.04	4.58	4.71	5.12	4.23	3.78	3.65	3.92	3.81	3.89	3.93	4.14
1942	3.40	4.40	4.60	4.20	4.20	4.00	3.80	3.60	3.10	3.50	3.20	3.30	3.78
1943	4.92	4.14	3.06	3.35	3.61	3.69	3.32	3.28	2.86	2.87	2.99	3.76	3.49
Mean	4.49	4.94	4.29	4.37	4.35	4.38	4.18	3.94	3.73	3.72	3.95	4.27	4.22

[1] Anemometer set about 7 feet above ground surface.

TABLE 329

EVAPORATION AT UPPER OTAY RESERVOIR, SAN DIEGO COUNTY, CALIFORNIA

Station:

Location—Upper Otay Reservoir about 13 miles southeast of San Diego. Lat. 32° 39′ N., Long. 116° 56′ W.

Elevation—550 feet.

Evaporation basin—Reservoir surface at gage height 3 feet below top of dam, had an area of 160 acres and an average depth of 20.7 feet. It was essentially a storage reservoir and both accessions and withdrawals were comparatively infrequent. Evaporation was obtained from direct measurement when there was no probable inflow or outflow.

Authority for data—H. A. Whitney, former Asst. Supt. and Hydraulic Engineer, Dept. of Water of San Diego.

Publication reference—Trans. Am. Soc. C. E., Vol. 80, p. 1989 (44).

Meteorologic data—None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total May to Nov.
1913	-------	-------	-------	-------	5.0	5.8	8.7	8.0	6.0	5.0	6.1	3.7	-------
1914	-------	-------	5.9	6.7	7.2	6.7	8.8	8.0	7.0	5.0	-------	-------	-------
1915	-------	-------	-------	-------	7.9	6.0	8.0	8.0	5.0	4.0	4.7	-------	-------
Mean	-------	-------	5.9	6.7	6.7	6.2	8.5	8.0	6.0	4.7	5.4	3.7	45.5

TABLE 330

EVAPORATION AT UPPER SAN LEANDRO RESERVOIR, ALAMEDA COUNTY, CALIFORNIA

Station:
  Location ____________________About five miles northeast of San Leandro. Lat. 37° 47′ N., Long. 122° 08′ W.*
  Elevation __________________460 feet maximum, 380 feet minimum, varies with reservoir level.
Evaporation pan:
  Type ________________________Floating pan.
  Description _______________Square, 3 x 3 feet, depth 18 inches.
Authority for data____________East Bay Municipal Utility District.
Publication reference _________Trans. Am. Soc. C. E., Vol. 99 (17).
Meteorologic data ____________Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	[1]0.57	1.08	2.54	4.00	5.04	6.28	7.04	6.10	4.46	3.94	2.92	2.14	46.11
1931	1.07	1.10	2.53	4.15	5.67	5.83	8.24	6.86	5.64	3.92	2.76	1.15	48.92
1932	1.37	1.42	2.21	3.68	4.80	6.14	6.91	6.37	5.39	4.52	2.20	2.04	47.05
1933	1.11	1.58	2.19	4.10	4.24	6.19	7.44	6.82	5.10	3.89	3.34	1.28	47.28
1934	1.16	.96	2.68	4.66	5.84	5.91	7.31	7.05	5.96	3.90	1.59	1.99	49.01
1935	1.08	1.28	2.02	3.04	5.58	6.99	7.35	6.78	4.79	4.13	2.43	1.50	46.97
1936	1.20	1.07	3.20	3.86	5.98	5.98	7.67	7.57	6.15	4.24	2.99	2.15	52.06
1937	2.29	1.14	1.71	3.88	6.15	6.12	7.80	7.35	5.39	3.55	2.12	2.04	49.54
1938	1.33	.82	1.73	3.15	5.74	6.82	7.27	7.66	5.73	3.84	3.36	1.44	48.89
1939	1.27	1.74	1.63	4.08	5.22	6.79	6.68	6.55	5.55	4.42	2.72	1.49	48.14
1940	1.06	1.00	2.27	3.78	5.26	6.33	7.35	6.46	4.67	3.90	2.46	1.47	46.01
1941	.84	.82	2.45	2.89	4.60	5.90	6.98	5.83	5.57	3.78	1.87	.96	42.49
1942	1.17	1.63	2.56	2.45	4.53	6.55	7.44	6.69	4.79	3.61	1.95	1.24	44.61
1943	1.42	1.22	1.72	3.85	6.59	6.10	6.68	6.42	4.86	3.45	2.20	1.75	46.26
1944	1.04	1.09	2.86	2.66	4.61	4.48	-------	-------	-------	-------	-------	-------	-------
Mean	1.20	1.20	2.29	3.62	5.32	6.16	7.30	6.75	5.29	3.94	2.49	1.62	47.18

* Location of pan: Jan. 11 to June 11, 1930, on northeast side of lake 300 feet ± northeast of outlet tower to upper San Leandro Filter Plant; June 11, 1930, to Nov. 17, 1938, on northeast side of lake 3,000 feet ± upstream northwest of outlet tower; and from Nov. 17, 1938, on the northeast side of the lake 1,500 feet ± southeast of the outlet tower.

[1] Partial record Jan. 11 to 31.

TABLE 331

EVAPORATION AT UPPER SAN LEANDRO RESERVOIR, ALAMEDA COUNTY, CALIFORNIA

Station:
  Location ------------------ About five miles northeast of San Leandro, 8,000 feet upstream from outlet tower to upper San Leandro Filter Plant. Lat. 37° 47′ N., Long. 122° 08′ W.
  Elevation ------------------ 490 feet.
Evaporation pan:
  Type ---------------------- Ground pan.
  Description --------------- Square, 3 x 3 feet, depth 18 inches, set in ground 15 inches.
Authority for data------------ East Bay Municipal Utility District.
Publication reference --------- Trans. Am. Soc. C. E., Vol. 99 (17).
Meteorologic data ------------ Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930---	[1]0.66	1.37	2.87	3.86	5.08	6.42	7.13	6.19	4.14	3.37	1.96	1.05	44.10
1931---	.82	1.00	2.46	3.67	5.61	5.56	8.06	6.55	4.78	3.08	1.66	.66	43.91
1932---	.96	1.29	2.21	3.36	4.66	6.32	7.00	6.42	5.22	3.88	2.16	1.12	44.60
1933---	.85	1.60	2.22	4.13	4.23	6.15	7.48	6.33	4.76	3.58	2.23	.60	44.16
1934---	.89	.88	2.72	4.62	5.64	5.97	7.48	6.78	5.59	3.31	1.04	1.15	46.07
1935---	.68	1.20	2.00	2.84	5.30	6.73	7.44	6.57	4.54	3.45	1.63	.94	43.32
1936---	1.02	.85	3.16	3.37	5.63	5.70	7.13	6.51	5.39	3.60	1.92	1.02	45.30
1937---	.66	.87	1.62	3.34	5.73	5.64	7.35	7.09	5.22	3.06	1.49	1.00	43.07
1938---	.79	.94	1.72	2.81	5.16	6.46	6.98	6.91	4.94	2.78	2.11	1.00	42.60
1939---	.88	1.47	1.71	3.93	5.23	6.53	6.82	6.28	5.14	3.57	2.03	.91	44.50
1940---	.58	.83	2.18	3.36	5.05	6.40	7.34	6.50	4.25	3.08	1.36	.97	41.90
1941---	.68	.68	2.34	2.69	3.89	5.76	6.86	5.49	4.99	2.93	1.16	.50	37.97
1942---	.51	1.26	2.49	2.43	3.94	5.97	7.13	6.28	4.21	3.04	1.12	.73	39.11
1943---	.77	1.01	1.59	3.10	5.75	5.51	6.28	6.37	4.86	2.74	1.51	1.00	40.49
1944---	.64	.94	3.00	2.73	4.53	4.46	-------	-------	-------	-------	-------	-------	-------
Mean--	0.76	1.08	2.29	3.35	5.03	5.97	7.18	6.45	4.86	3.25	1.67	0.90	42.79

[1] Partial record Jan. 11 to 31, 1930.

TABLE 332

EVAPORATION AT UPPER SAN LEANDRO RESERVOIR, ALAMEDA COUNTY, CALIFORNIA

Station:
  Location ---------- About five miles northeast of San Leandro, 8,000 feet upstream from outlet tower to upper San Leandro Filter Plant. Lat. 37° 47′ N., Long. 122° 08′ W.
  Elevation ---------- 490 feet.
Evaporation pan:
  Type ---------- Ground pan.
  Description ---------- Diameter 6 feet, depth 24 inches, set in ground 21 inches.
Authority for data ---------- East Bay Municipal Utility District.
Publication reference ---------- Trans. Am. Soc. C. E., Vol. 99 (17).
Meteorologic data ---------- Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	[1]0.41	1.15	2.60	3.59	4.92	6.11	6.73	5.79	3.91	3.18	1.71	0.90	41.00
1931	.72	.88	2.31	3.52	5.48	5.43	7.88	6.33	4.58	2.96	1.61	.54	42.24
1932	.89	1.21	2.20	3.36	4.45	6.07	6.78	6.23	5.02	3.64	1.89	1.10	42.84
1933	.77	1.51	2.20	4.04	4.18	5.94	7.12	6.04	4.44	3.29	2.10	.60	42.23
1934	.85	.87	2.55	4.46	5.46	5.87	7.12	6.56	5.47	3.20	.96	1.07	44.44
1935	.74	1.17	2.02	2.96	5.26	6.55	7.20	6.36	4.31	3.28	1.51	.87	42.21
1936	1.02	.88	3.03	3.34	5.51	5.59	7.04	6.38	5.18	3.43	1.81	.94	44.15
1937	.68	.89	1.80	3.42	5.67	5.56	7.06	6.59	4.85	2.85	1.38	.96	41.71
1938	.74	.90	1.69	2.78	5.06	6.26	6.74	6.64	4.66	2.68	1.98	.95	41.08
1939	.80	1.43	1.69	3.88	5.20	6.49	6.68	6.13	4.95	3.34	1.81	.81	43.21
1940	.58	.82	2.15	3.31	5.07	6.25	7.01	6.12	4.08	2.78	1.34	.96	40.47
1941	.78	.80	2.41	2.92	4.09	5.65	6.54	5.28	4.77	2.75	1.18	.55	37.72
1942	.55	1.24	2.46	2.47	4.22	5.87	6.88	6.00	4.01	2.96	1.08	.68	38.42
1943	.81	1.04	1.69	3.11	5.70	5.42	6.18	6.28	4.71	2.70	1.47	.97	40.08
1944	.76	1.20	2.95	2.86	4.70	4.54	-------	-------	-------	-------	-------	-------	-------
Mean	0.74	1.07	2.25	3.33	5.00	5.84	6.92	6.20	4.64	3.07	1.56	0.85	41.47

[1] Partial record Jan. 11 to 31, 1930.

TABLE 333

TEMPERATURE AT UPPER SAN LEANDRO RESERVOIR, ALAMEDA COUNTY, CALIFORNIA[1]

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	-------	50	52	55	55	61	62	64	60	58	51	42	-------
1931	44	50	52	53	61	61	67	64	60	57	48	43	55
1932	43	44	51	51	56	61	63	63	66	59	55	40	54
1933	40	43	50	52	52	58	65	64	60	62	52	45	54
1934	46	49	56	57	59	60	64	64	64	60	53	46	56
1935	45	47	46	54	56	62	64	65	62	57	47	46	54
1936	48	47	53	52	59	62	66	66	65	61	51	43	56
1937	36	43	50	51	58	63	65	65	64	60	52	47	54
1938	45	48	48	52	58	62	64	64	65	60	49	48	55
1939	45	47	48	56	58	60	63	64	66	59	52	47	55
1940	46	49	52	54	58	63	65	65	63	59	49	48	60
1941	47	49	53	53	59	61	66	64	62	57	52	47	60
1942	44	46	48	51	54	60	66	64	61	58	49	46	54
1943	46	48	50	52	58	58	64	67	64	57	50	46	55
1944	44	44	50	48	56	58	-------	-------	-------	-------	-------	-------	-------
Mean	44	47	51	53	57	61	64	64	63	59	51	45	55

[1] Records by the East Bay Municipal Utility District.

TABLE 334

WIND MOVEMENT AT UPPER SAN LEANDRO RESERVOIR, ALAMEDA COUNTY, CALIFORNIA[1]

Year	Total wind in miles												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930---	752	1,115	1,504	1,203	1,705	1,631	1,679	1,731	1,352	1,149	1,283	1 117	16,221
1931---	1,225	989	1,106	1,082	1,606	1,681	1,617	1,591	1,444	1,320	1,108	1,319	16,088
1932---	1,376	1,219	1,192	1,363	1,495	1,574	1,696	1 456	1,105	1,266	1,003	1,049	15,794
1933---	1,274	1,383	1,524	1 732	1,741	1,917	1,530	1,517	1,309	1,241	1,247	1,348	17,763
1934---	1,352	1,178	1,253	1,574	1,610	1,883	2,051	1,900	1,457	1,233	861	1,246	17,598
1935---	1,450	1,292	1,520	1,474	1,864	1,640	1,711	1,487	1,292	1,293	1,101	1,138	17,262
1936---	1,508	1,414	1,633	1,430	1,574	1,414	1,450	1,290	1,026	1,132	979	1,051	15,901
1937---	1,198	1,061	1,126	1,256	1,409	1,277	1,330	1,156	1,134	839	820	1,015	13,621
1938---	1,245	1,301	1,411	1 082	1,144	1,219	1,254	1,121	834	743	1,015	984	13,353
1939---	830	925	1,054	1,090	1,405	1,161	1,294	1,188	854	866	626	798	12,091
1940---	1,125	1,015	1,081	863	1,148	928	1,176	1,073	757	524	544	1,229	11,463
1941---	941	1,076	1,282	1,166	1,197	1,243	1,144	1,145	895	722	649	776	12,236
1942---	963	894	929	1,047	1,102	1,128	1,229	1,070	870	675	644	566	11,117
1943---	921	680	769	829	1,047	983	1,086	1,111	761	611	490	685	9,973
1944---	686	780	945	883	918	973	-------	-------	-------	-------	-------	-------	-------
Mean--	1,123	1,088	1,222	1,205	1,398	1,377	1,446	1,345	1,078	972	884	1,023	14,161

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[1] Records by the East Bay Municipal Utility District.

TABLE 335

EVAPORATION AT U. S. COTTON FIELD STATION, KERN COUNTY, CALIFORNIA

Station:
Location ------------------Two and one-quarter miles north of Shafter. Lat. 35° 32′ N., Long. 119° 16′ W.
Elevation ------------------367 feet.
Evaporation pan:
Type ----------------------Ground pan.
Description ----------------Diameter 6 feet, depth 24 inches, set in ground 20 inches. Bureau of Plant Industry type.
Authority for data-------------U. S. Bureau of Plant Industry. (Data computed by Emergency Rubber Project, U. S. Forest Service, U. S. Dept. of Agric.)
Publication reference ---------None.
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1924---	-------	-------	-------	-------	10.79	11.45	12.48	10.05	7.00	3.75	2.15	0.92	-------
1925---	0.94	1.98	4.32	5.34	8.54	10.16	11.06	8.24	6.00	3.73	2.14	.88	63.33
1926---	.73	1.70	4.74	5.04	8.67	10.10	10.61	8.80	6.40	4.09	2.32	1.07	64.27
1927---	1.17	1.31	2.90	5.47	8.74	9.61	9.61	8.35	5.98	4.34	1.46	1.21	60.15
1928---	.95	2.02	3.61	6.40	7.82	8.98	9.40	8.59	6.68	4.26	1.72	.74	61.17
1929---	.87	2.08	3.65	5.99	10.57	9.88	11.82	11.33	6.98	5.19	3.03	1.29	72.68
1930---	.91	2.28	3.92	6.94	7.61	10.35	11.35	9.94	7.30	4.71	2.44	1.15	68.90
1931---	.96	1.64	4.70	6.45	9.08	9.36	12.14	10.32	7.76	4.73	2.74	1.02	70.90
1932---	1.04	1.22	4.28	5.95	8.73	10.70	11.08	9.59	6.74	5.01	2.51	1.37	68.22
1933---	.89	2.04	3.98	6.81	7.27	9.37	11.82	9.82	6.69	5.23	2.49	.98	67.39
1934---	.80	1.68	4.38	7.73	9.28	9.69	11.35	9.35	7.72	4.36	1.76	.95	69.05
1935---	1.24	1.56	2.90	4.75	7.94	9.86	10.43	9.22	6.89	4.37	1.85	1.17	62.18
1936---	1.22	1.20	4.00	5.92	8.18	8.88	10.50	9.47	7.20	3.07	1.30	.72	61.66
1937---	.75	1.44	3.15	5.25	8.20	9.36	10.10	9.72	6.58	3.91	1.56	.72	60.74
1938---	1.10	1.83	2.86	4.65	7.47	10.42	10.45	9.48	6.73	3.68	[1]1.96	1.12	61.75
1939---	1.02	[1]1.88	2.91	5.78	7.91	9.67	10.65	9.55	6.91	4.54	2.82	1.76	65.40
1940---	1.01	1.55	3.79	5.71	-------	-------	-------	-------	-------	-------	-------	-------	-------
Mean--	0.98	1.71	3.76	5.89	8.55	9.86	10.93	9.49	6.85	4.31	2.14	1.07	65.53

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[1] Total estimated from partial records.

TABLE 336

EVAPORATION AT U. S. COTTON FIELD STATION, KERN COUNTY, CALIFORNIA

Station:
  Location ------------------Two and one-quarter miles north of Shafter. Lat. 35° 32′ N., Long. 119° 16′ W.
  Elevation ------------------367 feet.
Evaporation pan:
  Type ----------------------U. S. Weather Bureau pan.
  Description ---------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data------------Emergency Rubber Project, U. S. Forest Service, U. S. Dept. of Agric.
Publication reference ---------None.
Meteorologic data ------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1944---	-------	-------	-------	-------	-------	-------	-------	11.71	7.57	3.63	0.92	0.63	-------
1945---	0.77	2.52	3.75	8.33	10.48	12.46	15.14	12.35	8.97	5.37	3.01	1.71	84.86

TABLE 337

EVAPORATION AT THE U. S. DATE GARDEN, INDIO, RIVERSIDE COUNTY, CALIFORNIA

Station:
  Location ------------------At U. S. Date Garden, one and three-quarters miles west of Indio. Lat. 33° 42′ N., Long. 116° 15′ W.
  Elevation ------------------20 feet.
Evaporation pan:
  Type ----------------------Surface pan.
  Description ---------------Rectangular, 3 x 6 feet, depth 10 inches, set on 2 x 4 inch timbers.
Authority for data------------U. S. Date Garden, Bureau of Plant Industry, U. S. Dept. of Agric.
Publication reference ---------None.
Meteorologic data ------------Temperature.

Year	Evaporation in inches[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1924---	3.8	5.8	6.3	7.4	12.6	14.2	14.0	12.4	10.4	7.2	3.2	3.2	100.5
1925---	3.3	4.7	5.8	7.7	10.5	10.4	11.9	11.6	8.3	4.5	3.0	2.0	83.7
1926---	2.6	3.9	6.1	6.0	9.5	11.9	12.5	11.2	10.4	7.9	3.9	1.5	87.4
1927---	2.6	3.6	5.7	7.7	13.2	11.3	10.7	10.9	9.1	5.4	3.3	1.5	85.0
1928---	2.2	3.0	6.0	7.7	11.1	10.2	10.6	12.1	9.8	6.1	4.1	2.8	85.7
1929---	3.0	4.7	7.7	8.7	13.2	14.3	13.8	11.4	8.6	7.6	4.0	2.8	99.8
1930---	1.7	4.1	7.6	10.1	11.4	13.6	13.8	12.4	11.1	6.9	3.7	2.9	99.3
1931---	3.2	3.0	7.4	9.2	14.1	14.8	14.7	11.5	9.8	8.1	3.7	3.2	102.7
Mean--	2.8	4.1	6.6	8.1	12.0	12.6	12.7	11.7	9.7	6.7	3.6	2.5	93.1

[1] Measurements of evaporation were made daily by means of a standard rain gage stick which measured actual depth of water in pan.

TABLE 338

EVAPORATION AT THE U. S. DATE GARDEN, INDIO, RIVERSIDE COUNTY, CALIFORNIA

Station:	
Location	At U. S. Date Garden, one and three-quarters miles west of Indio. Lat. 33° 44′ N., Long. 116° 16′ W.
Elevation	20 feet.
Evaporation pan:	
Type	Ground pan.
Description	Bureau of Plant Industry pan, diameter 6 feet, depth 24 inches, set in ground 20 inches.
Authority for data	U. S. Date Garden, Bureau of Plant Industry, U. S. Dept. of Agric.
Publication reference	None.
Meteorologic data	Temperature.

Year	Evaporation in inches[1]												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1932	3.3	2.7	7.1	9.2	11.2	11.9	8.4	9.4	6.8	4.2	2.6	2.3	79.1
1933	1.6	2.9	6.2	7.5	10.3	12.1	13.2	11.7	8.5	6.2	3.7	1.9	85.8
1934	2.8	3.8	6.9	9.8	11.4	11.1	12.5	10.9	9.5	6.0	3.8	2.4	90.9
1935	2.6	4.6	5.9	8.3	11.4	12.6	12.2	10.4	7.9	5.7	2.9	2.3	86.8
1936	2.3	3.8	6.4	8.2	10.8	11.2	11.2	10.4	7.4	6.8	3.5	3.0	85.0
1937	1.9	3.7	5.1	8.2	10.3	11.0	11.6	10.6	8.2	5.5	3.5	2.9	82.5
1938	3.0	3.5	5.8	7.9	10.3	10.9	10.1	9.6	6.5	5.6	3.6	-------	-------
1939	2.9	3.1	4.9	7.9	11.0	12.0	10.6	8.2	-------	5.1	3.2	3.9	-------
Mean	2.6	3.5	6.0	8.4	10.8	11.6	11.2	10.2	7.8	5.6	3.4	2.7	83.8

[1] In a number of cases the records of evaporation at this station were incomplete and estimates were necessary in order to obtain monthly totals. Because of these estimates, values are limited to figures having a single decimal place, as it is thought this limitation gives better results.

TABLE 339

TEMPERATURE AT THE U. S. DATE GARDEN, INDIO, RIVERSIDE COUNTY, CALIFORNIA

Year	Mean temperature in ° F. (41)												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1924	55	64	61	70	83	91	92	91	87	72	65	54	74
1925	55	64	66	73	80	85	93	89	83	70	61	58	73
1926	55	61	69	72	78	88	91	90	85	77	66	54	74
1927	58	61	62	71	78	84	91	89	83	75	66	52	72
1928	58	59	66	70	78	86	91	91	87	74	64	56	73
1929	52	56	65	69	81	87	92	93	84	79	61	60	73
1930	53	65	66	75	74	87	92	90	83	74	64	54	73
1931	57	60	66	74	83	85	95	90	83	75	58	51	73
1932	51	58	67	73	79	86	89	89	85	72	65	50	72
1933	50	53	66	68	76	87	94	93	86	80	65	54	73
1934	58	65	76	77	84	84	94	93	86	78	66	58	76
1935	55	61	61	72	76	90	92	90	87	72	59	56	77
1936	55	58	68	75	82	88	93	91	84	74	63	54	74
1937	44	57	64	72	80	88	94	94	89	78	67	59	74
1938	54	52	65	75	81	87	92	91	82	74	66	61	73
1939	58	58	68	73	83	90	92	92	83	75	61	57	74
Mean	54	60	66	72	80	87	92	91	85	75	64	56	74

TABLE 340

EVAPORATION AT U. S. YUMA FIELD STATION, IMPERIAL COUNTY, CALIFORNIA

Station:
Location ------------------At Bard, California, on the Colorado River, 8 miles north of Yuma, Arizona. Lat. 32° 48′ N., Long. 114° 34′ W.[1]
Elevation ------------------135 feet.
Evaporation pan:
Type ---------------------Bureau of Plant Industry pan.
Description ---------------Diameter 6 feet, depth 2 feet, set in ground 20 inches.
Authority for data------------U. S. Yuma Field Station, Bureau of Plant Industry, U. S. Dept. of Agric.
Publication reference ---------None.
Meteorologic data ------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1910---	-------	-------	-------	-------	12.20	12.47	11.75	11.41	9.24	7.10	4.10	3.95	-------
1911---	2.99	3.65	5.80	9.09	11.14	11.22	9.65	10.58	8.15	6.59	5.03	3.56	87.45
1912---	3.96	5.30	7.71	6.40	9.00	10.14	9.44	9.00	7.63	5.61	4.19	2.86	81.24
1913---	3.51	3.71	6.64	7.22	8.22	9.05	9.13	7.87	7.90	5.13	3.03	2.37	73.78
1914---	2.92	3.84	5.92	6.20	8.59	10.50	10.14	10.24	7.55	5.00	2.95	1.88	75.93
1915---	2.49	2.75	5.33	7.36	9.14	10.44	10.25	8.82	6.42	5.49	4.08	2.82	75.39
1916---	2.41	3.95	6.27	7.66	9.65	8.74	9.81	7.62	6.48	5.62	3.79	2.51	74.51
1917---	2.04	3.57	6.12	6.96	8.86	9.44	8.89	8.50	6.09	6.29	3.18	2.59	71.53
1918---	2.83	3.40	4.90	7.27	9.65	9.89	9.60	8.13	6.58	4.80	3.65	2.34	73.04
1919---	2.93	3.45	4.98	7.62	9.10	9.97	9.53	8.23	6.85	5.27	3.22	2.91	74.06
1920---	1.85	2.43	5.22	8.07	8.63	9.55	9.96	8.27	6.38	5.18	2.79	2.50	70.83
1921---	2.07	3.85	5.69	7.61	8.38	8.66	9.32	7.68	6.36	4.33	2.84	1.99	68.78
1922---	2.23	2.86	5.08	7.26	9.20	9.44	9.75	7.98	6.57	5.55	3.33	1.96	71.21
1923---	2.61	3.75	5.36	6.94	9.35	9.08	8.69	8.67	7.28	5.53	2.83	2.09	72.18
1924---	2.76	3.68	5.25	6.46	8.21	9.21	9.66	8.95	6.74	5.18	3.91	2.75	72.76
1925---	2.56	3.45	5.37	6.42	9.69	9.62	9.46	9.05	7.14	3.96	3.20	2.33	72.25
1926---	2.30	3.20	4.97	5.75	9.67	9.11	9.94	7.71	6.27	4.92	3.00	1.84	68.68
1927---	2.08	2.44	4.63	6.18	9.16	9.02	9.03	8.73	6.99	4.44	2.79	2.21	67.70
1928---	2.27	3.00	4.90	6.92	8.22	9.24	9.41	8.43	6.86	4.74	3.15	3.29	70.43
1929---	2.40	3.49	5.37	6.48	8.49	9.09	8.59	7.11	5.77	4.71	3.09	2.24	66.83
1930---	1.90	3.20	4.93	6.52	8.33	9.31	9.22	7.82	7.26	4.86	3.12	2.35	68.82
1931---	2.16	2.24	5.30	5.69	8.10	8.59	9.43	7.32	6.63	4.94	2.85	2.05	65.30
1932---	2.57	2.44	5.42	6.68	8.74	8.80	9.49	9.11	6.88	4.71	2.93	1.70	69.47
Mean--	2.54	3.35	5.51	6.94	9.12	9.59	9.57	8.58	6.96	5.17	3.35	2.48	73.16

[1] Station was located about 200 yards north of office buildings in an area that eventually became influenced by nearby trees and buildings. Station moved to better location 200 yards west of the buildings probably about January, 1933. Records obtained at new location are tabulated separately.

TABLE 341

EVAPORATION AT U. S. YUMA FIELD STATION, IMPERIAL COUNTY, CALIFORNIA

Station:
  Location ------------------At Bard, California on the Colorado River, 8 miles north of Yuma, Arizona. Lat. 32° 48′ N., Long. 114° 34′ W.[1]
  Elevation ------------------135 feet.
Evaporation pan:
  Type ----------------------Bureau of Plant Industry pan.
  Description ----------------Diameter 6 feet, depth 2 feet, set in ground 20 inches.
Authority for data-------------U. S. Yuma Field Station, Bureau of Plant Industry, U. S. Dept. of Agric.
Publication reference ----------None.
Meteorologic data -------------Temperature, wind.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1933---	1.90	3.38	5.64	6.82	8.58	10.16	11.92	10.73	8.14	5.61	4.22	2.49	79.59
1934---	3.43	3.13	6.42	7.88	10.73	10.83	12.43	10.72	8.86	6.41	3.57	2.40	86.81
1935---	2.03	3.39	5.34	7.85	9.80	10.46	11.35	9.63	8.00	6.61	3.41	2.34	80.21
1936---	2.51	3.44	6.64	7.53	10.18	10.77	10.87	9.90	8.22	5.59	3.81	2.53	81.99
1937---	2.40	3.57	5.31	8.00	9.63	10.38	10.78	10.00	8.06	5.64	3.25	2.81	79.83
1938---	3.06	3.05	5.35	7.90	9.61	10.48	10.78	9.62	7.22	5.39	4.17	2.41	79.04
1939---	2.44	3.48	5.44	8.60	9.93	10.50	10.83	9.57	5.90	5.78	3.17	2.50	78.14
1940---	2.71	3.54	6.08	7.58	9.35	10.42	11.05	10.34	6.87	5.44	3.87	2.22	79.47
1941---	1.78	2.47	4.66	6.23	10.04	10.52	10.99	8.93	7.25	5.02	3.84	2.35	74.08
1942---	2.79	3.18	5.87	7.13	9.81	10.28	11.25	9.44	7.58	5.47	3.61	2.59	79.03
1943---	2.64	3.46	5.89	7.24	10.18	10.27	10.98	8.66	8.23	6.03	4.10	2.28	79.96
1944---	2.95	2.89	6.14	7.08	9.56	10.46	11.30	10.64	8.25	5.03	2.58	2.53	79.41
1945---	2.09	3.82	4.99	7.70	10.16	10.63	10.80	9.31	8.61	5.91	3.94	2.58	80.54
Mean--	2.52	3.29	5.67	7.50	9.81	10.47	11.18	9.81	7.78	5.69	3.66	2.46	79.84

[1] About January, 1933, the evaporation station was moved from about 200 yards north of the office building to about 200 yards west of the buildings. The move apparently was made to get away from the influence of trees and buildings as evaporation increased at the new location.

TABLE 342

EVAPORATION AT U. S. YUMA FIELD STATION, IMPERIAL COUNTY, CALIFORNIA

Station:	
Location	At Bard, California, on the Colorado River, 8 miles north of Yuma, Arizona. Lat. 32° 48′ N., Long. 114° 34′ W.
Elevation	135 feet.
Evaporation pan:	
Type and description	(1) U. S. Weather Bureau pan, Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill. (2) Screened ground pan, diameter 2 feet, depth 3 feet, set in ground 2.75 feet, screen ¼ inch mesh hardware cloth.
Authority for data	U. S. Yuma Field Station, Bureau of Plant Industry, U. S. Dept. of Agric.
Publication reference	Report: Investigation of Evaporation from a Screened Pan (48).
Meteorologic data	Temperature, wind.

Month	Evaporation in inches							
	U. S. Weather Bureau pan				Screened ground pan			
	1937	1938	1939	Mean	1937	1938	1939	Mean
January	3.18	4.30	3.57	3.68	2.72	3.94	2.93	3.20
February	5.05	3.95	4.46	4.49	3.64	3.19	3.90	3.58
March	7.06	6.76	7.12	6.98	5.13	5.29	5.08	5.17
April	10.35	9.97	10.39	10.24	7.70	7.76	7.38	7.61
May	12.16	12.09	12.71	12.32	8.66	9.08	9.21	8.98
June	14.01	13.24	13.57	13.61	9.20	9.88	9.56	9.55
July	14.45	13.83	13.58	13.95	9.64	9.96	9.52	9.71
August	12.66	12.11	12.18	12.32	9.46	9.36	8.62	9.15
September	9.95	9.31	7.29	8.85	7.60	7.14	5.76	6.83
October	7.13	6.62	7.77	7.17	6.27	5.86	6.56	6.23
November	4.05	5.25	3.98	4.43	4.19	5.28	3.55	4.34
December	3.85	3.31	3.66	3.61	3.62	3.05	3.35	3.34
Annual	103.90	100.74	100.28	101.65	77.83	79.79	75.42	77.69

TABLE 343

TEMPERATURE AT U. S. YUMA FIELD STATION, IMPERIAL COUNTY, CALIFORNIA

Year	Mean temperature in °F.												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1910	-------	-------	-------	-------	76	81	89	90	85	72	61	54	-------
1911	55	53	64	67	72	81	89	89	84	70	60	48	69
1912	54	56	59	65	72	83	86	86	78	68	60	51	68
1913	48	55	57	66	74	78	86	89	83	69	62	52	68
1914	56	57	66	69	74	81	89	88	82	71	64	48	70
1915	52	55	61	66	69	81	86	87	78	71	59	52	68
1916	51	61	66	67	72	80	90	86	82	67	56	48	69
1917	50	55	57	64	68	82	89	83	79	73	61	55	68
1918	52	56	64	67	71	87	88	85	82	72	59	50	69
1919	52	53	58	69	74	82	89	85	83	66	57	55	68
1920	54	59	59	64	73	81	89	87	77	67	58	52	68
1921	51	58	64	64	70	80	89	88	81	73	61	58	70
1922	49	54	58	63	74	83	89	88	86	71	56	56	69
1923	56	57	59	66	76	76	89	87	79	68	62	54	69
1924	52	57	57	63	71	84	87	86	83	67	61	52	68
1925	51	59	63	68	76	82	90	88	80	68	58	55	70
1926	51	59	64	70	74	83	88	87	83	73	62	52	70
1927	55	60	60	67	71	81	90	89	82	72	63	52	70
1928	54	56	63	67	75	81	87	88	84	72	61	54	70
1929	50	54	61	64	70	81	90	90	82	74	57	53	69
1930	52	62	63	71	76	81	90	88	80	69	62	52	70
1931	51	58	63	70	76	82	92	89	83	71	56	52	70
1932	50	56	63	70	74	81	89	89	87	72	60	49	70
1933	50	51	62	64	69	82	91	90	86	78	64	55	70
1934	56	61	71	73	79	79	92	91	84	74	62	56	73
1935	54	59	60	68	72	84	89	89	86	71	57	55	70
1936	54	58	65	70	77	85	90	91	82	72	63	55	72
1937	44	56	61	68	75	83	91	97	88	75	62	60	72
1938	57	57	60	68	74	83	89	90	86	71	57	56	71
1939	54	51	63	72	76	82	89	91	82	72	64	59	71
1940	58	58	65	70	78	86	89	91	84	74	59	58	72
1941	54	60	62	65	78	80	90	86	77	68	62	54	70
1942	55	54	60	66	73	82	92	89	81	73	63	56	70
1943	56	60	65	70	77	81	90	89	87	74	61	55	72
1944	54	54	61	66	75	78	87	90	85	73	59	55	70
1945	53	57	58	67	74	80	91	91	85	76	60	53	70
Mean	53	57	62	67	74	82	89	88	83	71	60	54	70

TABLE 344

WIND MOVEMENT AT U. S. YUMA FIELD STATION, IMPERIAL COUNTY, CALIFORNIA[1]

Year	Mean wind in miles per hour												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1910	------	------	------	------	4.1	3.8	3.6	3.4	2.4	3.7	3.3	3.5	------
1911	3.0	3.5	2.7	3.8	3.3	2.9	2.5	2.0	1.7	2.5	3.7	3.5	2.9
1912	3.2	4.0	3.9	3.8	3.3	2.6	2.3	2.3	2.1	3.0	2.9	4.0	3.1
1913	3.1	3.3	4.1	3.1	2.4	2.1	2.1	2.1	2.0	1.9	1.8	2.1	2.5
1914	2.8	3.4	3.0	3.3	2.4	2.3	1.9	2.2	1.7	1.6	1.0	1.8	2.3
1915	2.3	2.2	2.2	2.9	3.3	2.2	2.2	1.4	1.3	1.2	2.4	2.3	2.2
1916	2.8	2.9	3.3	2.4	2.6	2.5	2.0	1.7	1.2	1.9	2.3	2.3	2.3
1917	2.3	2.5	3.2	2.9	3.1	1.5	1.4	.9	1.0	1.0	1.2	1.2	1.8
1918	2.0	2.5	2.4	2.5	2.9	1.8	1.5	1.5	1.0	.9	1.9	1.5	1.9
1919	1.7	2.1	1.9	1.9	1.6	1.5	1.5	.9	1.2	1.2	1.5	2.0	1.6
1920	1.4	1.1	2.2	3.1	1.7	1.6	1.3	1.3	1.2	1.4	1.0	1.4	1.6
1921	1.1	2.3	1.8	2.3	1.4	1.2	1.2	.8	.7	.5	.6	1.0	1.2
1922	1.4	1.2	2.3	2.5	1.9	1.3	1.4	1.1	.8	.9	1.4	1.0	1.4
1923	1.1	2.1	2.0	2.2	1.7	1.3	1.2	1.1	1.3	1.4	1.3	1.8	1.5
1924	1.9	1.5	2.3	2.0	1.2	1.4	1.0	1.0	.7	1.0	1.4	1.9	1.4
1925	1.4	1.5	1.8	1.8	1.6	1.8	1.2	1.2	.9	.7	1.3	1.1	1.4
1926	1.2	1.3	1.2	1.2	1.4	.8	1.2	.7	.5	.6	.6	.9	1.0
1927	.9	1.0	1.3	1.3	1.6	1.0	1.0	.9	.9	.5	.7	1.1	1.0
1928	1.0	1.3	1.7	1.7	1.2	1.2	.9	1.0	.7	.8	1.0	1.3	1.2
1929	.8	1.7	1.5	1.5	1.2	1.0	.8	.5	.5	.5	.8	.5	.9
1930	.8	.9	1.3	.9	1.5	1.2	1.2	.9	.9	.9	.9	1.1	1.0
1931	1.0	.8	1.5	1.0	.8	.8	1.0	.9	.8	.9	1.0	1.1	1.0
1932	1.3	1.1	1.5	1.3	1.4	1.1	1.1	.9	.8	1.0	.7	1.0	1.1
1933	1.4	2.4	2.2	1.9	2.0	1.5	2.2	2.0	1.8	1.3	1.3	1.6	1.8
1934	2.0	1.6	1.4	1.7	2.0	2.0	2.4	2.0	1.7	1.4	1.2	1.3	1.7
1935	1.3	1.9	2.3	3.0	2.4	1.4	1.8	1.6	1.3	2.8	1.6	1.5	1.9
1936	1.3	2.3	2.5	2.2	2.0	1.5	1.7	1.4	1.3	1.3	1.7	1.5	1.7
1937	1.9	1.8	2.1	2.5	1.9	1.8	1.6	1.6	1.3	1.1	1.0	1.8	1.7
1938	1.8	1.7	2.6	2.7	2.1	1.7	1.7	1.3	1.0	1.2	2.1	1.3	1.8
1939	1.8	2.6	1.9	2.1	2.0	1.7	1.5	1.3	1.1	1.6	.9	1.1	1.6
1940	1.5	1.8	2.2	2.2	1.5	1.5	1.5	1.7	1.0	1.1	1.6	1.3	1.6
1941	1.1	1.0	1.6	1.8	1.8	1.4	1.5	1.2	1.0	1.2	1.5	1.5	1.4
1942	1.4	1.4	2.2	2.3	1.9	1.2	1.2	1.1	.7	1.0	1.1	1.3	1.4
1943	1.5	1.4	1.8	1.8	1.7	1.5	1.3	1.2	.9	1.1	1.4	1.1	1.4
1944	1.4	1.5	2.2	2.3	1.5	1.7	1.1	1.2	1.2	.7	1.3	1.2	1.4
1945	1.1	1.9	2.1	2.3	2.1	1.6	1.3	1.1	1.2	1.2	1.3	1.4	1.6
Mean	1.7	1.9	2.2	2.2	2.0	1.6	1.6	1.4	1.2	1.3	1.5	1.6	1.7

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[1] Anemometer cups set about 18 inches above ground surface.

TABLE 345

EVAPORATION AT VAN NUYS, LOS ANGELES COUNTY, CALIFORNIA[1]

Station:
  Location ____________ In orchard at Van Nuys. Lat. 34° 11′ N., Long. 118° 27′ W.
  Elevation ____________ 695 feet.
Evaporation pan:
  Type ____________ U. S. Weather Bureau pan.
  Description ____________ Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data ____________ Los Angeles Dept. of Water and Power.
Publication reference ____________ None.
Meteorologic data ____________ Temperature.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
	In shade of trees												
1930	1.34	2.42	3.01	4.44	5.01	5.51	7.00	6.22	3.94	3.22	2.80	1.94	46.85
1931	2.15	1.93	4.47	3.98	4.38	5.32	6.36	4.74	3.31	2.34	1.99	1.30	42.27
1932	1.50	1.18	3.21	3.62	3.76	4.50	4.68	4.20	2.32	2.23	2.53	1.12	34.85
1933	.88	2.08	2.89	2.34	3.99	3.82	4.19	3.26	2.28	2.07	2.04	1.34	31.18
1934	1.71	1.51	3.05	3.79	3.91	2.52	4.46	4.15	3.53	2.44	1.71	1.34	34.12
1935	1.23	1.53	2.41	3.69	4.33	4.71	5.87	5.75	4.12	2.56	1.04	1.34	38.58
1936	1.57	.90	2.86	3.70	4.93	5.09	5.42	4.84	3.45	2.06	1.92	1.24	37.98
1937	1.00	.91	2.13	3.88	3.15	4.07	5.44	4.35	3.16	2.04	.90	1.17	32.21
1938	1.43	1.07	2.01	2.66	3.89	3.35	4.73	4.11	3.34	1.92	2.32	1.43	32.26
1939	1.28	1.61	1.88	2.69	3.13	4.05	4.74	3.87	3.78	2.11	1.26	1.30	31.70
1940	.87	1.34	2.09	2.54	3.54	3.55	5.27	4.12	3.04	2.31	1.73	1.20	31.60
1941	.87	.87	1.71	2.80	4.56	4.08	4.87	3.74	2.92	2.05	1.57	.98	31.02
Mean	1.32	1.45	2.64	3.34	4.05	4.21	5.25	4.45	3.26	2.28	1.82	1.31	35.36
	Shade trees removed January 1942												
1942	1.12	1.44	3.06	3.19	5.24	5.47	7.63	6.93	4.00	2.72	1.64	1.21	43.65
1943	1.25	1.32	1.78	3.30	5.54	5.67	6.56	6.47	5.18	2.51	1.68	.82	42.08
1944	.93	1.00	3.39	4.41	4.30	5.27	5.79	6.94	4.14	2.24	1.08	1.00	40.49
1945	1.05	1.46	1.96	4.76	5.17	4.18	6.54	6.10	4.70	2.23	1.61	1.03	40.79
Mean	1.09	1.31	2.55	3.92	5.06	5.15	6.63	6.61	4.51	2.42	1.50	1.01	41.76

[1] This is not a representative station as the evaporation pan was set in an orchard. In February, 1934, it was moved 20 feet to get away from trees. In January, 1942, the trees were removed, which accounts for increased evaporation thereafter.

TABLE 346

TEMPERATURE AT VAN NUYS, LOS ANGELES COUNTY, CALIFORNIA

Year	Mean temperature in °F												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1930	53	60	62	64	61	69	75	75	67	65	60	52	64
1931	55	57	63	65	69	70	80	78	69	64	54	50	64
1932	49	54	63	61	64	66	70	71	69	65	63	49	62
1933	48	52	57	58	60	66	73	73	65	66	60	53	61
1934	56	57	64	64	67	65	74	73	71	64	60	57	64
1935	54	56	54	61	64	71	75	78	74	64	55	54	63
1936	55	54	60	62	66	71	77	76	71	64	60	52	64
1937	43	52	57	60	65	69	74	74	72	66	57	56	62
1938	56	52	55	60	64	66	72	74	73	62	56	57	62
1939	52	50	56	62	62	68	72	74	74	64	60	57	63
1940	54	54	58	61	65	68	72	72	67	65	57	56	62
1941	54	56	58	57	68	66	73	71	66	62	60	53	62
1942	54	52	54	57	61	66	74	71	67	64	58	52	61
1943	52	55	56	59	63	64	71	70	71	65	57	50	61
1944	50	49	56	56	60	62	67	72	70	63	53	52	59
1945	50	53	51	57	60	63	72	73	72	64	57	52	60
Mean	52	54	58	60	64	67	73	73	70	64	58	53	62

TABLE 347

EVAPORATION AT VICTORVILLE, SAN BERNARDINO COUNTY, CALIFORNIA

Station:
Location ------------------On north side of Mojave River about 3 miles southeast of Victorville. Lat. 34° 34′ N., Long. 117° 17′ W.[1]
Elevation ------------------Approx. 2,700 feet.
Evaporation pan:
Type ----------------------U. S. Weather Bureau pan.
Description ----------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data------------Div. of Irrig., SCS, U. S. Dept. of Agric.
Publication reference ---------Calif. Dept. of Pub. Wks., Bulls. Nos. 44 and 50 (6) (45).
Meteorologic data ------------Temperature, wind.

Month	Evaporation in inches				Mean temperature in ° F.				Total wind in miles			
	1931	1932	1933	Mean	1931	1932	1933	Mean	1931	1932	1933	Mean
January	-------	2.52	2.29	2.40	-------	36	36	36	-------	1,329	1,586	1,458
February	3.28	2.79	3.88	3.32	-------	42	37	40	1,231	1,353	1,314	1,299
March	6.83	6.51	-------	6.67	50	49	-------	50	1,713	1,648	-------	1,680
April	7.83	7.75	-------	7.79	58	52	-------	55	1,831	1,804	-------	1,818
May	10.63	9.20	-------	9.92	64	58	-------	61	1,649	1,844	-------	1,746
June	10.55	10.22	-------	10.38	66	65	-------	66	1,604	1,189	-------	1,396
July	12.26	11.99	-------	12.12	79	70	-------	74	1,187	1,303	-------	1,245
August	9.68	11.67	-------	10.68	76	70	-------	73	1,001	1,228	-------	1,114
September	8.10	8.34	-------	8.22	66	66	-------	66	1,198	890	-------	1,044
October	5.17	5.72	-------	5.44	58	56	-------	57	1,004	1,036	-------	1,020
November	3.14	3.89	-------	3.52	44	48	-------	46	1,123	671	-------	897
December	1.92	2.08	-------	2.00	38	36	-------	37	1,136	1,105	-------	1,120
Annual	-------	82.68	-------	82.46	-------	54	-------	55	-------	15,400	-------	15,937

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[1] This station was located in a desert area adjacent to river bottom brush and trees. Anemometer cups set 8 inches above the top of Weather Bureau pan.

TABLE 348

EVAPORATION AT WEST SADDLE PEAK, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ------------------On west slope of Saddle Peak, northwest of Santa Monica. Lat. 34° 04′ N., Long. 118° 41′ W.*
  Elevation ------------------890 feet.
Evaporation pan:
  Type ------------------Ground pan.
  Description ------------------Diameter 2 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data------------------Los Angeles County Flood Control District.
Publication reference ------------------Annual Reports of Los Angeles County Flood Control District (28).
Meteorologic data ------------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	-------	7.67	6.70	5.15	3.36	1.54	-------
1932	1.64	3.95	4.24	5.70	5.92	7.15	7.88	8.02	5.62	5.05	4.54	2.58	62.29
1933	-------	3.28	4.13	4.50	5.95	6.30	7.90	7.56	5.32	4.66	3.96	1.42	-------
1934	2.30	1.62	3.78	5.14	6.62	5.44	7.86	7.52	6.24	4.41	2.48	1.51	54.92
1935	.96	2.35	2.14	2.99	4.60	6.27	8.15	7.44	6.20	4.64	2.72	2.18	50.64
1936	2.09	1.12	3.35	3.56	5.95	7.09	7.81	7.58	6.19	3.96	3.28	1.49	53.47
1937	1.18	1.44	2.88	4.42	4.46	6.50	7.96	7.25	6.42	4.86	2.68	2.66	52.71
1938	2.72	1.58	2.69	3.60	5.18	4.98	6.94	7.20	5.95	4.34	3.78	2.57	51.53
1939	2.00	2.96	3.50	3.84	4.82	6.18	[1]6.75	6.74	5.96	4.48	2.48	1.76	51.47
1940	1.50	1.92	2.86	3.59	4.71	5.65	6.59	5.91	5.33	4.26	2.98	1.62	46.92
1941	1.41	1.44	1.86	2.50	4.80	4.55	5.42	5.00	4.43	3.31	3.02	1.16	38.90
1942	1.66	2.28	3.46	1.40	3.89	3.74	5.26	4.86	4.42	3.60	2.76	2.36	39.69
1943	1.75	1.86	1.30	2.74	4.01	4.68	5.00	5.10	5.04	3.07	1.64	1.16	37.35
1944	2.15	1.64	3.80	4.14	4.18	4.13	5.15	6.44	5.21	-------	-------	-------	-------
Mean	1.78	2.11	3.08	3.70	5.01	5.59	6.82	6.74	5.64	4.29	3.05	1.85	49.66

* Located on west slope of a hill that has a heavy brush cover.
[1] Partly estimated.

TABLE 349

EVAPORATION NEAR WHITTIER, LOS ANGELES COUNTY, CALIFORNIA

Station:
  Location ------------------Near Whittier. Lat. 33° 59′ N., Long. 118° 03′ W.
  Elevation ------------------203 feet.
Evaporation pan:
  Type ------------------Ground pan.
  Description ------------------Diameter 6 feet, depth 3 feet, set in ground 2.75 feet.
Authority for data------------------San Gabriel Valley Protective Association.
Publication reference ------------------Calif. Dept. of Pub. Wks. Bull. No. 33 (5).
Meteorologic data ------------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1929	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	3.13	2.30	-------
1930	1.28	2.02	2.84	3.64	3.94	4.92	6.97	5.77	4.21	3.36	2.87	1.96	43.78
1931	1.73	2.34	3.96	4.20	4.54	5.75	6.72	5.83	4.72	3.50	2.09	1.02	46.40
Mean	1.50	2.18	3.40	3.92	4.24	5.34	6.84	5.80	4.46	3.43	2.70	1.76	45.57

TABLE 350

EVAPORATION AT YUMA, YUMA COUNTY, ARIZONA

Station:	
Location	In concrete reservoir at Southern Pacific Railroad Depot, Yuma, Arizona. Lat. 32° 44′ N., Long. 114° 37′ W.
Elevation	138 feet.
Evaporation pan:	
Type	Floating pan.[1]
Description	Square, 36.3 x 36.3 inches, depth unknown.
Authority for data	U. S. Geological Survey, Dept. of the Interior.
Publication reference	None.
Meteorologic data	Water temperature.

Month	Evaporation in inches			Water temperature in evaporation pan ° F.		
	1903	1904	Mean	1903	1904	Mean
January	3.32	3.60	3.46	52	51	52
February	3.48	3.90	3.69	52	60	56
March	5.28	6.47	5.88	63	66	64
April	7.21	9.37	8.29	69	70	70
May	9.84	10.01	9.92	72	77	74
June	10.25	10.11	10.18	80	82	81
July	10.75	10.24	10.50	84	86	85
August	10.70	8.56	9.63	87	89	88
September	9.05	6.62	7.84	82	84	83
October	5.79	7.02	6.40	72	69	70
November	3.80	4.41	4.10	62	59	60
December	3.39	2.01	2.70	52	52	52
Annual	82.86	82.32	82.59	69	70	70

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[1] Evaporation pan floated in concrete reservoir 40 x 50 feet in which water surface fluctuated daily between one and six feet below top of reservoir wall, thereby affording the evaporation pan considerable protection against wind.

TABLE 351

EVAPORATION AT YUMA CITRUS STATION, YUMA COUNTY, ARIZONA

Station:
  Location ------------------On University of Arizona Citrus Experiment Farm, 8 miles south of Yuma, Arizona, 40 feet higher than Yuma Valley.
  Elevation ------------------181 feet.
Evaporation pan:
  Type ------------------------U. S. Weather Bureau pan.
  Description ----------------Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data-------------University of Arizona Citrus Experiment Station.
Publication reference ---------Climatological Data, Arizona Section (40).
Meteorologic data -------------None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1921---	4.38	7.40	10.58	12.64	14.91	18.18	18.91	16.72	13.32	8.83	5.54	4.29	135.70
1922---	3.84	5.48	7.66	10.82	13.85	15.39	17.82	13.27	11.40	8.73	5.39	3.54	117.19
1923---	4.46	5.35	7.88	9.58	14.29	14.12	15.87	14.81	10.83	8.60	4.97	3.01	113.77
1924---	4.55	6.27	7.47	10.45	14.52	17.65	20.36	18.14	13.56	9.84	6.65	4.18	133.64
1925---	4.62	5.89	8.24	10.86	14.09	15.23	16.19	15.03	11.56	5.92	4.71	3.57	115.91
1926---	3.44	5.14	7.80	9.38	13.07	14.74	16.38	13.69	10.97	8.32	5.41	2.96	111.30
1927---	3.51	4.12	7.47	9.88	14.76	15.09	15.84	13.90	11.40	8.22	4.71	3.80	112.70
1928---	4.34	4.92	8.56	11.56	14.45	17.05	17.44	14.92	12.51	8.25	5.79	4.51	124.30
1929---	3.98	5.48	8.69	11.02	15.39	16.42	16.74	13.86	10.25	9.05	6.23	4.91	122.02
1930---	3.66	5.77	8.10	10.76	13.36	15.88	16.24	14.03	12.06	8.92	6.49	4.93	120.20
1931---	4.90	3.65	9.58	11.06	14.26	15.01	16.11	12.90	10.95	8.07	4.92	3.74	115.15
1932---	4.43	4.54	9.30	11.35	14.73	15.27	16.54	15.81	13.08	8.04	5.98	3.32	122.39
1933---	3.60	5.10	8.98	10.55	13.76	15.61	18.41	15.83	12.46	8.83	6.45	4.37	123.95
1934---	5.12	5.05	10.00	11.93	15.54	14.37	17.44	14.07	12.32	9.19	5.32	3.81	124.16
1935---	3.54	5.43	7.63	11.28	13.73	16.86	16.11	14.00	11.85	8.93	4.91	3.53	117.80
1936---	3.81	4.92	8.75	11.30	13.78	15.17	15.40	14.75	12.26	8.47	5.89	3.99	118.49
1937---	3.15	5.30	7.72	11.10	13.24	14.30	15.91	15.06	12.31	8.63	5.28	4.12	116.12
1938---	4.81	4.37	7.42	11.28	13.26	14.93	15.69	14.55	11.45	7.53	6.26	3.66	115.21
1939---	3.67	4.57	7.42	10.96	13.87	15.00	15.80	14.32	9.38	8.71	4.60	4.80	113.10
1940---	4.02	4.71	8.66	10.52	13.46	15.16	15.70	15.08	10.28	7.76	5.26	3.86	114.47
1941---	2.55	4.12	6.64	8.41	13.21	13.70	15.60	12.58	10.44	7.29	5.52	3.66	103.72
1942---	4.56	4.76	7.80	9.58	13.20	14.46	16.49	13.90	11.26	8.11	5.16	4.28	113.56
1943---	4.27	5.18	8.03	10.42	14.32	13.77	16.11	13.86	10.57	8.22	5.60	2.83	113.18
1944---	3.78	3.61	7.68	9.32	12.51	13.40	15.42	14.26	11.45	7.42	3.32	3.87	106.04
Mean--	4.04	5.05	8.25	10.67	13.98	15.28	16.60	14.56	11.58	8.33	5.43	3.90	117.67

TABLE 352

EVAPORATION IN YUMA VALLEY, YUMA COUNTY, ARIZONA

Station:	
Location	About one mile west of Yuma in an alfalfa field. Lat. 32° 45′ N., Long. 114° 36′ W.[1]
Elevation	127 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	U. S. Weather Bureau.
Publication reference	U. S. Weather Bureau Climatological Data (40).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1917	3.08	4.52	6.79	6.80	8.48	-------	9.32	11.51	7.79	5.21	3.30	2.85	-------
1918	3.46	4.49	5.30	9.29	10.15	13.84	11.88	9.99	7.99	5.39	4.20	2.02	88.00
1919	4.30	4.51	6.64	9.15	7.79	9.08	10.55	7.57	5.66	5.23	3.16	2.99	76.63
1920	2.74	2.98	5.23	6.78	7.31	8.12	9.55	9.25	7.50	5.43	2.75	2.66	70.30
1921	2.52	4.10	5.75	7.16	7.63	8.82	11.18	-------	6.58	3.64	2.43	-------	-------
1922	2.71	3.32	5.38	7.64	8.38	9.13	10.31	8.97	8.33	5.64	3.18	1.97	74.96
1923	2.78	3.72	5.68	6.35	8.03	8.21	10.27	-------	-------	6.50	3.07	2.38	-------
1924	3.18	4.10	5.44	6.77	8.35	9.53	10.15	11.66	9.13	6.63	4.28	2.03	82.24
1925	2.94	3.23	5.43	6.39	7.65	7.88	9.95	12.28	9.61	5.11	4.24	3.16	77.87
1926	3.18	3.88	5.59	6.20	8.59	8.69	9.39	8.43	6.54	5.15	3.36	2.51	71.51
1927	2.66	3.80	6.28	7.96	10.43	10.65	9.61	8.68	7.11	4.76	2.68	2.69	77.31
1928	4.09	4.82	6.89	9.76	11.03	12.08	10.67	9.00	8.02	5.75	4.45	4.03	90.59
1929	3.96	4.85	7.76	8.88	10.94	10.43	10.52	9.31	6.93	5.51	4.19	-------	-------
Mean	3.20	4.02	6.01	7.62	8.83	9.70	10.26	9.70	7.60	5.38	3.48	2.75	78.55

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[1] The station was in an alfalfa field until January 1, 1928, then moved ¼ mile southwest. Field of cotton to the south and vineyard to the north.

TABLE 353

EVAPORATION IN YUMA VALLEY, YUMA COUNTY, ARIZONA

Station:	
Location	Nine and one-half miles southwest of Yuma and nine miles south of the Colorado River.[1]
Elevation	110 feet.
Evaporation pan:	
Type	U. S. Weather Bureau pan.
Description	Diameter 4 feet, depth 10 inches, set on 2 x 4 inch timber grill.
Authority for data	U. S. Weather Bureau.
Publication reference	U. S. Weather Bureau Climatological Data (40).
Meteorologic data	None.

Year	Evaporation in inches												
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1931	-------	-------	-------	-------	-------	-------	-------	10.51	9.07	6.72	4.47	3.51	-------
1932	4.92	4.57	9.31	10.43	14.24	13.58	14.81	13.44	10.05	6.82	4.74	2.95	109.86
1933	3.35	4.90	7.99	9.42	11.12	12.29	14.62	12.49	10.21	7.38	5.11	3.55	102.43
1934	4.36	4.64	7.75	9.38	11.93	11.63	14.33	12.10	9.55	7.62	4.45	3.52	101.26
1935	3.16	4.90	7.12	9.25	12.46	14.24	12.55	9.30	7.88	7.31	4.12	3.18	95.47
1936	3.62	4.75	8.06	10.54	13.20	14.17	13.39	12.08	9.87	6.71	5.14	3.53	105.06
1937	3.40	5.52	7.78	11.04	12.68	14.21	14.93	12.50	10.25	7.27	4.69	4.16	108.43
1938	4.70	4.22	7.38	11.32	12.49	13.16	13.25	11.66	9.68	6.86	5.67	3.47	103.86
1939	3.87	4.78	7.66	10.40	12.43	13.66	15.05	13.68	8.43	8.04	4.02	3.83	106.85
1940	3.76	4.59	7.87	9.78	11.94	-------	-------	-------	-------	-------	-------	-------	-------
Mean	3.90	4.76	7.88	10.17	12.61	13.37	14.12	11.97	9.44	7.19	4.71	3.52	103.64

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[1] The first Yuma Station, located one mile west of Yuma, was discontinued in 1929 and the present station, bearing the same name, was located 9.5 miles southwest of Yuma in an irrigated area used for growing general field crops.

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DIVISION OF WATER RESOURCES

DEPARTMENT OF PUBLIC WORKS

STATE OF CALIFORNIA

When the Department of Public Works was created in July, 1921, the State Water Commission was succeeded by the Division of Water Rights, and the Department of Engineering was succeeded by the Division of Engineering and Irrigation in all duties except those pertaining to State Architect. Both the Division of Water Rights and the Division of Engineering and Irrigation functioned until August, 1929, when they were consolidated to form the Division of Water Resources. The Water Project Authority was created by the Central Valley Project Act of 1933.

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